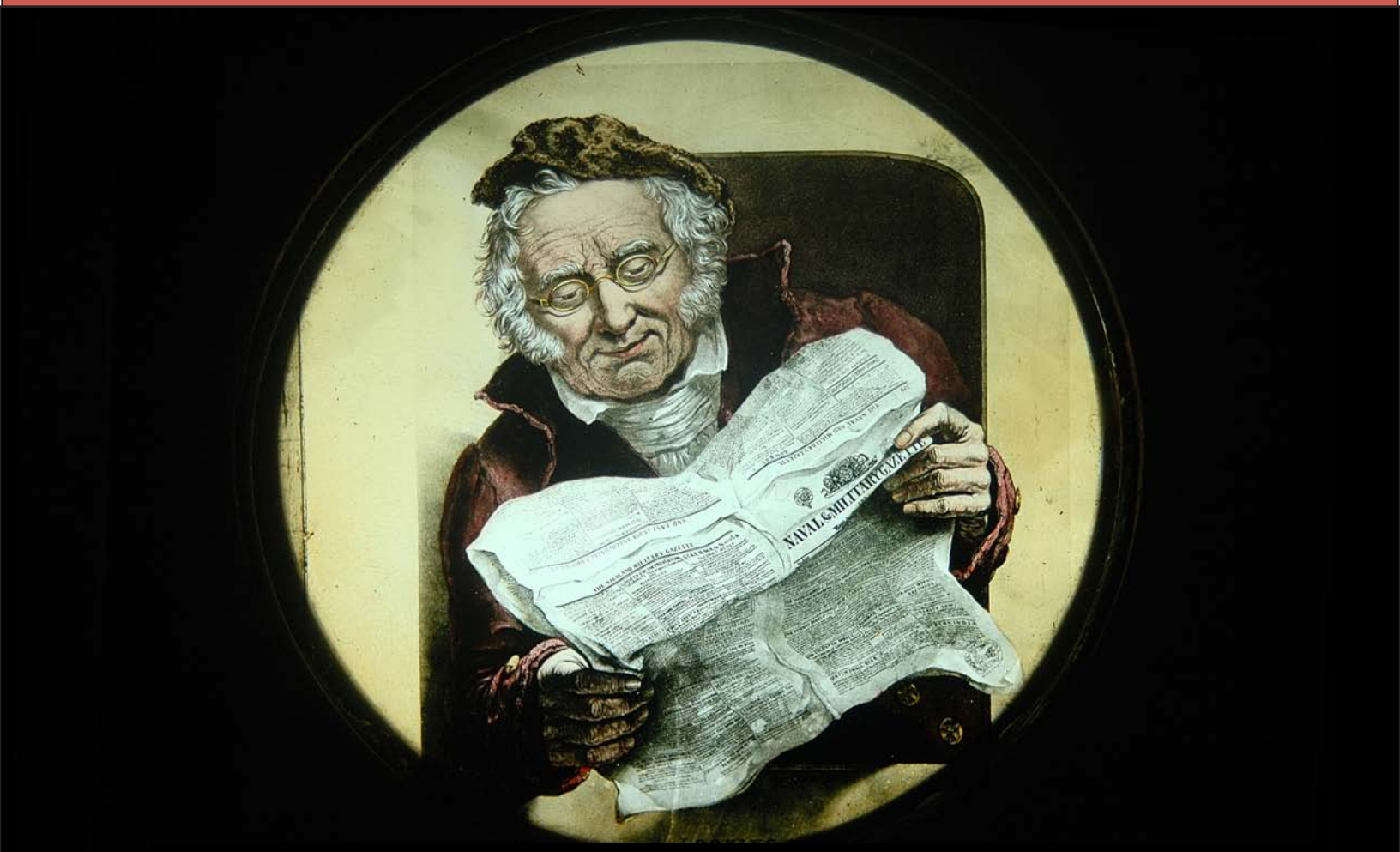
ISSN 1059-1249

The Magic Lantern Gazette

Volume 21, Number 3 Fall 2009



Special 30th Anniversary Issue

The Magic Lantern Society of the United States and Canada

www.magiclanternsociety.org

An Autumn Reverie

But, while we gaze, the scene has changed. It is a **dissolving view**, varying every instant, for the sun has looked over the eastern mountain, and in a moment, the green and crimson and yellow forests on the western range, stand out clear and sharp against the sky.

New York Observer and Chronicle, October 31, 1901

The year 2009 marks the 30th anniversary of our society's publication. *The Magic Lantern Gazette* began life in April 1979 as a mimeographed newsletter, only a few pages long, entitled *ML Bulletin*. The first editor was my mother, Leora Wood Wells, who continued to edit the Bulletin until 1981 and then co-edited it with Larry Rakow for a couple of additional years. She also was the most frequent contributor in the early days. Under Larry's editorship, which lasted until 1986, the journal was given a more descriptive title, *The Magic Lantern Bulletin.* The journal began to include illustrations on a regular basis and acquired a more sophisticated design. Ed Lennart took over the editorship from 1987 to 1988. Exactly 20 years ago, with the Fall 1989 issue, the journal title was changed to *The Magic Lantern Gazette* and both the society and the journal acquired a new logo and the journal was redesigned, courtesy of editor Larry Cederblom. Numbering of journal issues began anew with that issue becoming Vol. 1, no. 1. Larry Cederblom was succeeded as editor by society founder Joe Koch, co-editing with Jack Judson from 1992 to 1994, and then Jack Judson (1994), Margaret and Nancy Bergh (1995-1996), and our longest-serving editors, Bob and Sue Hall (1996-2006). When I took over as editor in the fall of 2006, I introduced color covers and yet another new look for the journal, and I made a major effort to increase the scholarly content of the journal. I believe it is now well established as a leading outlet for original research on the magic lantern.

This special double-sized issue is an anthology of writings from past issues of our journal. Naturally, most of the selections are from the earlier years of the society's existence, and there are no articles included from the period since I took over as editor, since most members will be familiar with those. In choosing articles to include, I tried to select contributions that represent a cross-section of the more substantial articles that have appeared in the journal. An important criterion was that the articles had to be well written and of some lasting value even years after they were first published. I have included only articles originally written for our publication. Over the years, a number of excellent research articles were reprinted from other journals, but those are not included in this collection. I also did not include technical articles on topics such as restoring, cataloging, or storing magic lanterns and slides, because these articles did not seem particularly suitable for such an anthology.

In assembling this issue, I have re-formatted each article to fit the current format of the journal. I also have re-edited some of the articles, correcting various typographical or spelling errors, supplying missing references, and in some cases eliminating some material that is no longer relevant (such as references to current prices of lanterns or other collectables). Because many of the early articles lacked illustrations, I have supplied appropriate illustrations to supplement the articles; others include the illustrations as originally published. For research articles, I have provided editor's postscripts that summarize more recent research on the same topic. I divided the contributions into five general categories, with selections within each group in chronological order: Collectors and Showmen, Magic Lantern History, The Magic Lantern in Church, The Magic Lantern in Literature, and a section called Just for Fun.

My hope is that this special issue will resurrect some long-lost articles that are still valuable to magic lantern researchers, or are just entertaining to read. The contents of this issue are a tribute to all of the authors and past editors who have kept our publication going over the last three decades.

Kentwood D. Wells, Editor
451 Middle Turnpike
Storrs, CT 06268
kentwood.wells@uconn.edu
860-429-7458

The Magic Lantern Gazette

Special 30th Anniversary Issue Fall 2009

Table of Contents

Part I: Collectors and Showmen

Leora Wood Wells	The Gift (1979)	4
Dick Balzer	Pilgrimage (1981)	5
Terry Borton	The Magic Lantern: A Family History (1982)	7
Katherine Leddick Hill	"The Liberty" and Lantern Shows (1982)	9
Bob Bishop	Lear's Magical Lanterns (1983)	11
Dick Balzer	In Search of Ephemera (1983)	12
Henry Clark	My Limelight was a Lemon--Part 3 (1997)	15

Part II: Magic Lantern History

Nancy Bergh	The Magic Lantern Slide Set to Music: The Illustrated Song Slide (1980)	16
W. Willeroy Wells	Illumination in Magic Lanterns (1983)	18
Willem Tebra	Robertson and His Phantansmagoria (1986)	21
Joe Koch	A Refresher on German Toy Lanterns (1994)	25
Joe Koch	Outdoor Magic Lantern Projection (1994)	28

Part III: The Magic Lantern in Church

David Brooke	The Magic Lantern in Church (1980)	30
Cheryl C. Boots	The Intersection of Technology and Religion: Magic Lantern Hymn Slides (1993)	32

Part IV: The Magic Lantern in Literature

Robert H. Woodward	The Magic Lantern in American Literature (1981)	36
Leora Wood Wells	The Magic Lantern and the Passing Show (1981)	37
Leora Wood Wells	Lewis Carroll in Magic Lantern Land (1982)	39

Part V: Just for Fun

Leora Wood Wells	Brownies, Wogglebugs, and Magic Lanterns (1981)	43
Larry Cederblom	The Magic, Magic Lantern Show (1989)	45
Jane Dayus-Hunch	Gilberts' Galantee Show (1999)	46

The Gift

Leora Wood Wells

***ML Bulletin*, Vol. I, no. 1, April 1979**

He was an unlikely looking millionaire—the wiry little man with the heavy accent and threadbare black suit—but he was one of the most successful antique dealers in the entire Northeast section of the country. His shop was the old-fashioned kind that our family called "a good pokin' place." Every conceivable kind of object could be found there, if you looked long enough and in the right places: miscellaneous bits of hardware, fans, purses, toys; fine painting sandwiched between old ice skates and sets of Victorian chairs, shelves of china and glassware.

Nothing was marked. What is cost—or indeed, whether you got it at all—depended entirely on the dealer's mood of the moment and what he thought of you. One of our favorite sports was to watch him demolish people he didn't like, as he did one day when an expensively dressed woman examine an oriental platter worth, at the time, about $30.

"How do I know it is a *genuine antique*?" she asked accusingly.

He mumbled an unintelligible reply and turned the plate over to show its bottom, worn by many years of use.

"How much is it?" she asked.

He looked her straight in the eye without blinking. "Four hundred and fifty dollars," he said.

With an unladylike snort, she marched out of the shop. The dealer permitted himself the tiniest shadow of a smile, but his eyes twinkled as he stole a sidelong glance at us and other customers who had watched this little drama.

Now, having driven away the arrogant rich lady, he turned his attention to us. We had found a beautiful magic lantern with a vertical red body, brass chimney and a fine set of pictorial glass slides. Our small daughter was holding it lovingly in her hands.

"How much is this?" she asked.

"Two hundred and fifty dollars," he said. Her face fell and her brown eyes mirrored her disappointment.

"Oh, 'scuse me," he said playfully. "I meant two dollars and fifty cents. Would that suit you better?"

Magic lantern #3 from the Wells collection, purchased from Rubenstein's Antiques in Rockland, Maine, August 1961, for $2.50. Photo by K. D. Wells.

It was my turn to look astonished. He glanced up at me. "I know what it is," he said, as if I had challenged him. "And I know what it's worth. My price is $2.50."

He died a few years after that, as we discovered when we entered the open door of the shop [at the close of an auction of its contents] and found everything gone but piles of trash on the floor. Something caught my eye, and I stopped to pick it up. It was a magic lantern slide, a photograph of Thorwaldsen's lyrical bas-relief "Morning."

Nostalgia for the strange, shrewd little man overwhelmed me. I tried to speak, but had to clear my throat three times before I succeeded.

"I think this was meant for us," I said finally. "It's as if he'd played one last joke and left us a gift—a gift that only we would recognize and understand."

"The Gift," a photographic lantern slide of Thorwaldsen's *Morning*, rescued from the remains of Rubenstein's Antiques, after the contents of the shop had been auctioned off. Wells collection.

Leora Wood Wells (1923-2003) was the mother of the current editor of the *Magic Lantern Gazette*, and the first editor of our society's publication, originally called the *ML Bulletin*. This article appeared in the first issue of the *ML Bulletin* in 1979. She continued to edit the journal until 1981, and then produced several more issues from 1982 to 1984 in collaboration with co-editor Larry Rakow. She also contributed many articles to our publications, several of which appear in this anthology.

Leora Wood Wells with John Barnes (left) and William Barnes, in front of their cinema museum in St. Ives, Cornwall, in 1981, the same year that Dick Balzer visited the museum, as described in the next article. Photo by K. D. Wells

Pilgrimage

Dick Balzer

ML Bulletin, Vol. III, no. 2, July 1981

It began quietly, as I suppose such things often do. There was no fanfare, just a whistle and a train slowly beginning to move. By 12:30 AM, on the morning of May 9, 1981, a half hour after having left London's Paddington Station, I was asleep in my couchette and on the beginning of a journey I had often thought about over the last five years. Nine hours later, having had a good night's sleep, I found myself in the picturesque shoreline village of St. Ives, Cornwall. The town was still asleep, as it was too early in the day for its merchants to open and too early in the spring for flocks of tourists to fill its street. I had come to visit the Barnes Museum of Cinematography.

Lantern slide of St. Ives, Cornwall, in the late 19th century, by an unknown photographer. Wells collection.

It is difficult to pick up a book that has been written in the last twenty years about magic lanterns or the precursors of the movies without reading of the Barnes brothers and their museum. Famous as the museum is, it is not terribly accessible. While living in England for a year and a half, my wife and I talked of the trip, but we never took it; and over the years, returning to England several times, we never found time to make the trip. But here I was in St. Ives at last, about to see this showcase of early optical toys and magic lanterns.

On the way to William Barnes's house, I ran into John. For those of you who have never met the brothers Barnes, it is quite difficult at first glance to tell the twins apart. Within an hour, the three of us were sitting in William's St. Ives digs talking about lanterns and collecting. John left Bill and me to catch up on the year since we had last seen each other, and then it was a two-minute walk back to the museum for a before-hours tour.

Walking in the door one comes upon a beautiful early nineteenth century French print of "La Laterne Magique" and a pair of motorized zoetropes to show the uninitiated what effects early motion could provide. Turning a corner one passes a Charlie Chaplin exhibit before coming upon examples of shadow puppets, silhouettes, silhouette slides, and early lantern slides with exchangeable metal sliding parts that I had never seen the likes of before. The walls are crowded with prints, and another large display cases downstairs contains views for the "polyrama panoptique" and similar devices.

Upstairs the walls are jammed with displays and explanations. I passed an early peep show, prints of peep shows and lanterns, then some early lanterns and illuminants, more lanterns, slides, thaumatropes, a lovely zoetrope, and a wood-cased praxinoscope theatre. Continuing down the aisle I passed from pre-cinema to early movie machines.

All the time I was looking at the displays, John and Bill were explaining little details, adding more history. I knew we were moving along, that time was passing, but all I could feel by the time we were back downstairs was a sensory overload—too much to take in too quickly. Soon Bill and I were headed back to his house for lunch.

Phenakistoscopes on display at the Barnes Museum of Cinematography in 1981. Photo by K. D. Wells.

Over Cornish pasties, we talked more about their collection. Bill said there isn't enough space in the museum to house even a fraction of the collection. The collection is stored in a couple of buildings close by William's house. He asked if I'd like to look at some of the material: books, catalogues, slides, and/or optical toys? Would I like to? Would a sugar addict like to be turned free in a Swiss chocolate factory?

We began in an upstairs storeroom. Bill showed me a very early (circa 1800) phantasmagoria lantern. The lanterns were hard to get to, so we moved to a bookcase. Pick out a book, and next to it there is another edition of the same book and next to it another edition, each slightly different. Whereas I'm generally concerned with trying to get a single copy of a certain book, the goal of the Barnes brothers is to have every edition of a particular book.

We weren't too deep into what seemed an endless supply of books before we decided to move downstairs to wander amongst old cardboard boxes. All types, all shapes of boxes. What they had in common was that they were all filled with slides. One box might have a changing chromotrope, another dissolving views, a third double slippers. Soon John was with us. Bill went off to make afternoon tea while John continued where Bill had left off. Another box was opened. This one contained early silhouettes on glass. Then panoramas, and more dissolving sets. Across the crowded aisle were more boxes, containing optical toys. We picked up one box full of flipbooks, some very early, some late like the German "fliptease."

By now, Bill was signaling tea was ready. There was one more box John wanted to show me before tea, and the one became a second before we emerged to join Bill. After tea, Bill went to see his mother, and John and I returned to the museum so I could have a second look. This time, after meeting John's charming wife, I would my way through the museum by myself, slowing taking in each case, reading the comments and looking with particular interest at the lanterns and slides. So much to take in and so little time! The space, so well organized, still seemed too small to encase

Magic lanterns on display in the Barnes Museum in 1981. Photo by K. D. Wells.

this vast collection, and the stillness of the objects seemed a stark contrast to the liveliness of the material. John and I talked about this. He mentioned his dream of larger space in which displays could be changed and there could be more demonstrations of motion.

I thanked John and made my way back to Bill's to pour over two more boxes, one full of catalogues, the other ephemera, that we had earlier moved from the warehouse to his house. I opened the lid of the first box and found maybe thirty catalogues. No time to read in detail the different material; just looking through volume after volume, stopping briefly to read a little from a Riley Brothers operator's guide or to look more carefully at an 1835 P. Carpenter catalogue. By now, I realized little was registering in my mind, but I continued to want to see as much as I possibly could.

Exhausted, but wonderfully happy, I decided to take a last stroll around town. Having filled my lungs with air, I roamed back to see Bill for a last time. Soon he and John walked me back to the train. Too quick a visit, too much in too short a time. Twelve hours after arriving in St. Ives, I was back on a train, this time headed overnight for London, and three hours after arriving back in London, I would be headed for Heathrow and a plane back to New York. There would be time on the plane to think about my pilgrimage, achieved after so many years of anticipation.

Dick Balzer served as the second Chairman of our society from 1984 to 1989. He also has regularly served as one of the auctioneers at our conventions. He has an exceptionally diverse collection of magic lanterns and other optical toys. He has contributed a number of articles to our publications and is the author of *Optical Amusements: Magic Lanterns and Other Transforming Images*, an illustrated catalog of an exhibit of his collection held at the Museum of Our National Heritage in Lexington, Massachusetts in 1987, and *Peepshows: A Visual History* (Harry Abrams, New York, 1998).

The Magic Lantern: A Family History

Terry Borton

ML Bulletin, Vol. IV, no. 1, Spring 1982

It was Winter, 1905, at my great-grandfather's big house in Philadelphia. A line of little children stood with their noses pressed against the glass windows of the living room. Excitement swirled like the snow outside. Proper little Quaker boys pushed and shoved to see down the road; proper little girls pushed just as hard—and tried their best not to spoil their freshly starched dresses on the steamy windows.

Suddenly, their was a shriek of joy. Around the corner came a flicker of light.

"He's coming, Grandfather Carter!" danced faith. "He's coming."

Grandfather Carter—who seemed very tall, very ancient, very Quakerly—looked dispproving. "Thee is in error, child. Thy eyes are deceiving thee. There's nothing there but snowflakes."

"No! Come see! Come see!" cried his grandson, Johnny, tugging him to the window.

A gradually, Grandfather Carter would allow himself to be drawn to the window, and gradually agree that, yes, just perhaps, there might be the lamplighter coming down the street through the storm, and yes, it was just possible that he would get to the gas lamp in front of the house before his lighter was blown out by the wind, but no, under no circumstances could the magic lantern be lit until it was truly dark, and the only light outside was that of the newly lit gas light, casting its flickering shadows on the snow.

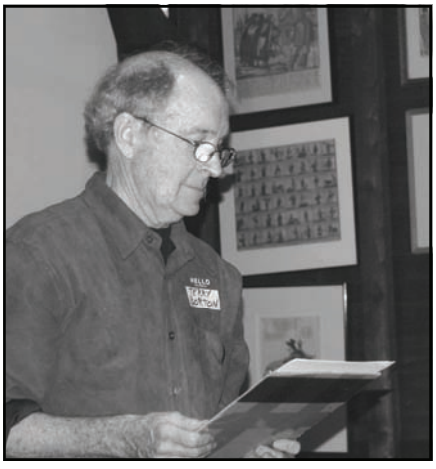
The ritual—the slow tease—continued. The lamp of the polished Marcy Sciopticon had to be carefully lit with a broom straw. The wicks had to be turned down low so as not to crack the lens. The focus had to be adjusted. The sheet had to be stretched tighter in a vain effort to erase the wrinkles. The wick had to be turned up. The focus had to be adjusted again. And finally, after all the waiting, there on the sheet was the giant ghostly man with the blue suit. His terrified eyes darted back and forth from child to child, hoping against hope that none of the good Quaker boys and girls would say the terrible magic word that would make his nose grow a solid foot, hit the wrinkle in the sheet, and shoot straight up in the air.

"ABRACADABRA!" the good Quaker children all screamed in unison.

And so the show went on. Grandfather Carter was a chemist and respected Philadelphia scientist (He was once on a City Committee to Investigate Perpetual Motion). As a result, his grandchildren were instructed with a heavy does of astronomy slides and natural history slides and microscopic creature slides. But the slide that most enchanted Johnny was a beautiful garden fountain with water that really moved (For one period later in his life, Johnny would become a landscape gardener specializing in garden pools). And the slide that most fascinated Johnny was of a boy carving a picture of his teacher on the schoolhouse door—which suddenly opened to reveal the teacher himself! (In later life, Johnny would become evasive when asked why this slide was especially memorable).

It was Johnny who inherited the magic lantern and made it part of my own upbringing in the late days of WW II. We no longer waited for the lamplighter, but the sense of ritual remained. The lens always had to be removed before a show, wrapped in a clean blanket, and put by the radiator to warm. The wick was still carefully lit with the end of a broom straw. During the show, the living room of our farmhouse in Alexandria, Virginia, always reeked of kerosene—for my generation, an unusual smell that was as much a part of the magic lantern experience as the man who ate the rats. And—because the shows were usually given when my grandfather (Grandfather Carter's son-in-law) came to visit, they took on an extra magical quality. The very nature of our language shifted, from the hard staccato of war-time Washington to Grandfather Borton's "thee and thy,"—the Quaker plain speech my parents no longer used in daily life.

When I had children of my own, my father gave the magic lantern to me. During the late sixties, while my kids were small, we packed the neighborhood children into our tiny Cambridge, Massachusetts apartment. Always, I was careful to warm the lens, and light the wick with ceremony. In spite of the their TV sophistication, the kids were enthusiastic, with the occasional exception of my son, Mark Carter, who was sometimes annoyed by the invasion of neighbors and embarrassed by the hidden ham emerging in his father.



Terry Borton in 2009, standing in front of part of Dick Balzer's collection of magic lantern prints. Photo by K. D. Wells.

In this photograph of a lantern show, taken in 1948 by Terry's sister, his brother, his mother, and Terry (right) are watching his Dad project a phantasmagoric close-up of the "Tiger." The family is laughing because the Tiger is threatening to eat the family dog.

Terry Borton joined our society in 1982, shortly before this article appeared, and served as Secretary/Treasurer of the society from 1984 to 1987. He is a professional magic lantern showman and founder of The American Magic Lantern Theater, which gives authentic Victorian magic lantern shows around the country and in many other countries, with themes ranging from holidays such as Christmas and Halloween to a Patriotic show that provides a visual and musical tour of American history. He and his wife Debbie are the world's leading authorities on the work of magic lantern slide artist Joseph Boggs Beale, and their research will culminate in two books: *Before the Movies: American Magic-Lantern Shows and the Nation's First Great Screen Artist, Joseph Boggs Beale*, and *Cinema Before Film: Victorian Magic Lantern Shows and America's First Great Screen Artist, Joseph Boggs Beale*.

"The Liberty" and Lantern Shows

Katherine Leddick Hill

***ML Bulletin*, Vol. IV, no. 2 & 3, October 1982**

When I started showmanship, I felt all alone in the whole world—but I had some (many) great shows. As a young woman, I spent one year in the Metropolitan Museum in New York City studying art—mostly symbolic—and also the buying a selling of find paintings. I was born in the home of musicians and artists, so the squeezing of a paint tube was second nature.

Trials are inevitably a proof of God's care—and so it was in February, 1952, when the day arrived that I found myself along with three young daughters. I was confident and comforted by the fact that "the wind is tempered to the shorn lamb." With the Twenty-third Psalm and the Dutch Battle Hymn, I prayed and sang my way to the architectural wreck and restoration, yes, the blossoming of the Liberty Eatery and Antique Emporium—Whitehall, New York.

The work started—the building was condemned—the foundation revealed canal water under the surface of the first floor. The suggestion that I give up on the whole project was reversed, and step-by-step, the way was opened ahead, to raise the whole building, to erect a sea wall, and to construct a new foundation. Good poured to me from channels unexpected and undreamed of, and on November 11, 1952, the Liberty was open for business!

The dining room on the water level was completely furnished, with no two chairs alike, the majority purchased off village porches. Tables were old store counter tops. Kerosene lamps provided light. The open fireplace gave cheer, together with a fifteen dollar Estey pump organ. On the Champlain canal, tugs and barges chugged and tooted, passing to or from the lake at the adjacent lock—and in my heart was a hymn of praise!

Blessings poured in: new friends, new faces—new ideas—new progress in business—fresh inspiration and great joy. The roots of the Liberty were going deeper. She was perfoming a blessing to the wayfarer—feeding the hungry—restoring the soul with goodness and a feeling of "coming home." Business grew with word from mouth to mouth—we never had to advertise! Many state governors, generals, railroad presidents, and world famous personalities entertained in her humble simple dining room, browed in her antique emporium, slept in her beautiful snuggeries beneath the butterfly roof, and were delighted and instructed by the lantern shows presented in her Phantasmagoric Theater.

In 1954, I became the recipient of my first show. My father was a guest years before at the home of Alfred Steiglitz's father at Lake George, New York. Through this connection, I became owner of the collection of the non-photographic, hand-painted Steiglitz slides. I could give a fine show of the highlights of the French and Indian Wars and the American Revolution, with some funnies and activated ones. A typical program:

The Liberty's Latest Baby Phantasmagoric Theater

Classics of America!
Unique! Authentic! Beautiful!

Personal Collection
of
Joseph Boggs Beale
Philadelphia, Pa.
Professional Artist—Showman
Also the
Great Steiglitz Show of the American Revolution

Bible, Revolution, Civil War
Katherine Leddick

Classics, Children's Stories, Poems
Professor and Mrs. Robert G. White

Military and Naval Programs
Captain Edward Farmer

Fresh oil, or blessings which came to the Liberty, included the old Steiglitz show, "The New World and the American Revolution," which was a favorite of Abraham Lincoln. This was the first motion feature with painted stills and reached New York City from Germany in the 1850s. Jewel dust (emerald, ruby, etc.) was incorporated with gelatin to produced magnificent colors which did not lose their beauty with age. The show filled halls "twice an evening" when given in this country.

Following the above bequest came the old Philadelphia show, painted and owned by Joseph Boggs Beale. This included slides illustrating the War Between the States, Uncle Tom's Cabin, the Life of Abraham Lincoln, Bible events, children's stories, and well-known literature.

Both the Steiglitz and Beale shows were given nightly free of charge to dinner guests at the Liberty Eatery. Afterwards, we passed the hat. I presented the show for innumerable state and local historical societies, at arts festivals, at colleges, and for businessmen. It was shown every day during the Canadian World's Fair, Expo 67, to an estimated total audience of more than one million persons. The Canadian press releases stated:

> This refreshing exhibition shows the United States of America and its founders in the sacred vignette and proper light that they deserve... It faithfully depicts consecrated me under divine guidance laying the foundations of the first democratic nation on this planet.

The flier I prepared for businessmen read, in part:

> The particular show I would like to present to your Directors or personnel will revive and instill a higher attitude for success, and is guaranteed to produce new ideas and a better, happier business outlook. It is entitled "Independence Day—How to Build a Nation Individually and Collectively," and it carries a message as refreshingly inspirational as were the convictions of our founding fathers. It can divert depressions, labor unheavals, and all-too-prevalent sense of futility.

Three years ago, after I had lectured in Cooperstown, New York, for the New York State Historical Association, my show was stolen—here at my business address. This indeed was some show, because it pointed out where our Declaration of Independence and Bill of Rights came from. This crucial point is not taught by our schools, colleges, or churches! I had it step-by-step—everyone loved it and truly loved American more.

Since it was lifted, I lost all motivation for renewal. "Marley's Ghost" by Beale may come out this Christmas, but something resembling a firecracker has to explode somewhere near. Who wants to give an old Temperance show when the greatest of all—needed at this time—has gone?

At this point, I have run out of wind. I live six months in Sanibel, Florida, and six months at my heaven here. I was thirty years at the range, but now am retired.

The Liberty has been my baby in every way. Once started, there is no stopping in giving birth. I love her and she has returned to me great joy. She raised my children, who now are married and flown the nest. She inspired me and many others with a greater thirst for non-commercial, quiet, restful enterprise—with adventures in good eating as well as good thoughts and things.

Many injustices and episodes giving evidence of unkindness have occurred along the path, but persistence to work on, sing, and count the numberless blessings, has carried us far above and beyond—to a feeling of accomplishment through labor and love.

Two lantern slides by Joseph Boggs Beale. Top: Lincoln's Gettysburg Address. Bottom: A scene from Edgar Allan Poe's *The Raven*. Wells collection.

Katherine Leddick Hill (1905-1999) was born in Whitehall, New York and for many years ran a restaurant and antique shop in her home town. She acquired many of the lantern slides that originally had been in the personal collection of the artist who did the paintings for the slides, Joseph Boggs Beale, and she used these slides in her own magic lantern shows. Many of these slides from Beale's own collection are now in the collection of Terry Borton and The American Magic Lantern Theater and form the basis for the many shows presented over more than 25 years by Terry and his troupe.

Lear's Magical Lanterns

Bob Bishop

***ML Bulletin*, Vol. V, no. 3, Sept. 1983**

Bedford Square in all its centuries of existence has probably never been host to such an improbable series of performances as was presented in the Architectural Association Hall during the International Convention of the Magic Lantern Society of Great Britain. This climactic showing of magic lantern performances, lectures, and displays was brought to a proper crescendo as the magical lanterns of Douglas and Anita Lear....

The Lears brought with them their brass and mahogany triple Noakes and Norman lantern. In addition, there was a hand-cranked vintage moving picture projector, a series of bells, whistles, chimes, flutes, a harmonium, and an American organ to lend atmosphere to the occasion.

On being introduced, Doug climbed upon a chair to display a hill wool sweater, knitted by Anita, upon which was emblazoned the words, "Lear's Magical Lanterns." While he was making small talk with the audience, there came the sound of a great gong.... The gong continued to sound, and the harmonium joined in, while on the screen, the Chinese Procession appeared. A marching column of peasants, seemingly endless in length, ceaselessly paraded while the harmonium created chaos in the background.

During this part of the program, Anita is the prime projectionist, while Doug produces the entrancing sound effects and music fitting to the various views upon the screen. The Ratcatcher appears and the furry little devils disappear into the sleeping giant's mouth as easily as you or I would swallow vitamin pills....

The Ratcatcher. Wells collection.

A Storm at Sea appears. There is a peaceful harbor scene; a ship lies alongside the pier. Daylight fades and darkness comes. A small boat dissolves in the mist. The moon appears, tracing a wake of light upon the shimmering harbor waters. A lighthouse materializes and several large ships roll and heave upon the ocean….

So gradually does all this occur, that I caught myself holding my breath. Anita, the lady projectionist, is truly magic! The sun rises, the fog gradually lifts. High waves begin to surge and roll. (Cymbals clash, but you know it is thunder!) Lightning flashes as the ship fights a losing battle with the storm.

Seagulls soar over the water. Angels appear, searching for lost souls. A band of spirits rises heavenward on the screen. Doug fills the hall with the sad strains of "Going Home, going home, I am going home." The storm eases. A fire flares on the sinking ship. A lifeboat appears as the burning vessel sinks beneath the waves.

A modern steamship (circa 1900) approaches, smoke streaming from its stack. The rescue takes place and all return to port. There is wild applause in the Architectural Hall!

Borton collection

Bob Bishop was one of the original founders of the Magic Lantern Society of the United States and Canada, which started with a group of magic lantern collectors in the Seattle area. He was named an Honorary Life Member in 2004. He has contributed many articles to our publications, often under the name "The Old Projectionist," and his essays on magic lanterns have been collected into several books. This article, somewhat abridged here, describes his experience at one of the famous Lear magic lantern shows in England.

In Search of Ephemera

Dick Balzer

***ML Bulletin*, Vol. 5, no. 4, December 1983**

I don't really know how I got started chasing magic lantern ephemera. Maybe it was when I first seriously started attending the antique shows and found that more often than not, the best pieces were either already gone or too expensive for my modest means. Whatever the reason, I found that if I just sort of poked around, looking through piles of this or that, sooner or later something would turn up. I rarely found the poking around boring or particularly burdensome, because much of what I poked through was new to me. For instance, I knew nothing about trade cards when I began and learned a lot from looking at them. At with most things, early success sustains one for longer and more fruitless searches.

Of course, there are easier ways to chase ephemera. There are paper dealers, antiquarian book dealers, and various "pickers" who, one they know your taste, may acquire something for you, but unless you are willing to do the unglamorous routine sorting, you will not, I think, find surprises, and certainly you won't be getting any terrific "bargains"—another attraction I forgot to mention.

Some of my best finds are not even pictured here. They include an ugly metal stand, which at first sight, I couldn't figure out, but which I later (through trial and error) realized was use for stamping out lantern slide masks—a terrific piece. I have also found an instruction sheet for binding strips, crayons for coloring lantern slides, a song sheet with a magic lantern, and the list goes on.

Slides Showing Lanterns

Of the slides I own, the two I am most pleased with are a slide with a print of the Robertson Phantasmagoria show (Fig 1) and a very early Dutch slide (Fig. 2). The Robertson slide was found at Brimfield in a pile of very ordinary stationary slides. It's a great slide! Unfortunately, I don't know the maker, but I'll bet it was part of a dissolving set, and if anyone ever sees the ghost, I WANT IT. Better still is the story about the Dutch slide. I bought it several years ago, with three or four other very early slides. Quite recently, a magic lantern enthusiast from Europe was visiting and looking through my collection. When he came across the slide, he said I should take very good care of it, because it depicts one of the first lanterns. I thought he was wrong, and said it was a lantern, but not a magic lantern. He insisted and showed me an illustration in a photography book which proved to me that, in fact, here was an early illustration of a lantern. Sometimes dumb luck can help a collection grow.

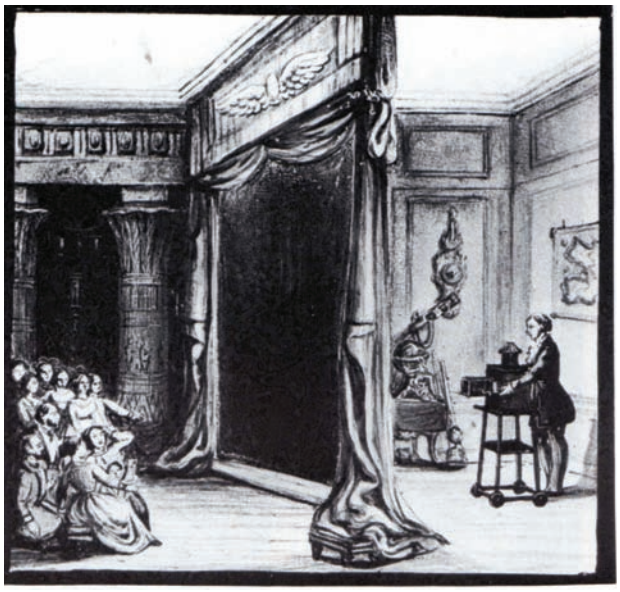


Fig. 1. Robertson's Phantasmagoria show.

Fig. 2. Early Dutch slide of a magic lantern.

Trade Cards

Trade cards, I have learned, are very collectible in and of themselves. The Brooks spool card (Fig. 3) is one of the most common and easiest to find. Rarer is the type of card illustrated (Fig. 4), where you can turn a dial and the image the lantern is projecting changes. The numbers of different types of cards goes on. As you can see, there are cards used as business cards (Fig. 5), Christmas cards (Fig. 6), valentine cards (Fig. 7), and ones where heating the card will make an image emerge (Fig. 8). For anyone interested in trade cards, the good news is there are a lot out there.

Entrance Tickets

I don't think many people are interested in these, so if you find them, they won't be expensive. I became interested because I found a couple of different kinds of tickets included with toy lanterns. Almost all the others I have added to my collection have come from trading with other people (Fig. 9).

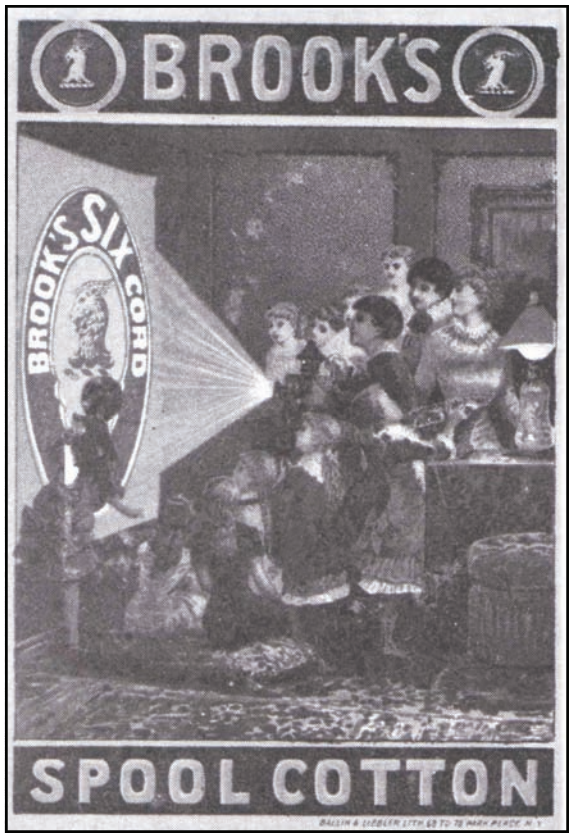


Fig. 3. Trade card for Brook's Spool Cotton, using a magic lantern image to sell the product.

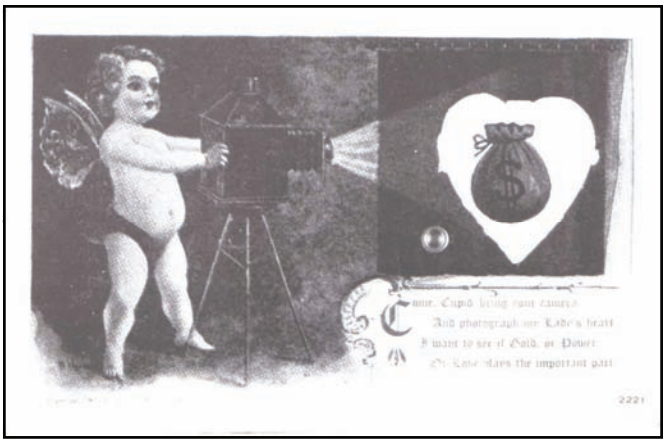


Fig. 4. Trade with rotating magic lantern image.

All images from the Richard Balzer collection

Fig. 5. Selling magic lanterns without magic lantern images. A trade card for Philadelphia lantern manufacturer and dealer Theodore J. Harbach.

Fig. 6. Christmas card with a magic lantern, somewhat strangely covered in purple violets. This same image was used for other holidays as well, such as New Year's Day and Easter.

Fig. 7. Late 19th or early 20th century Valentine card.

Fig. 8. A magical magic lantern card. Heating the card causes a previously invisible image of a lantern slide to appear on the screen.

Fig. 9. A selection of magic lantern exhibition tickets. The top two are generic tickets, one to be used for any sort of magic lantern lecture, and the other of a type that came in sheets with toy magic lanterns. The bottom ticket was printed for a specific religious stereopticon lecture in 1907. This type of ticket is more historically interesting, because it tells us something about the subject matter of lantern lectures, venues, and the cost of admission.

Advertisements and Paper Items

If you're patient enough and can find an old stack of the *Illustrated London News* or pre-1900 *Scientific Americans*, you should be able to come away with at least an advertisement or two. If you're really lucky, you'll find a story or a print. I actually sifted through forty copies of the *Illustrated London News* before finding the 1858 Christmas edition with the familiar print of the man pulling a Chinese gentleman's queue and the story that went with it. Again, these things are more difficult to find than expensive, so keep looking.

Prints

Although I have not illustrated this article with any prints, I must confess that at the heart of my emphemera collections are my prints. I have been extraordinarily lucky to find as many as I have, and I have passed up several that I wish I hadn't, but they were too expensive at the time.... Prints tend to be fairly expensive. Most of mine were acquired when I bought two different collections. Over the years, I have added several others. Once, I was at a London print dealer's shop asking about magic lantern prints, and he said I was the second person in two days to inquire about them. He informed me that a gentleman named Lear—no gentleman, Doug Lear, to beat me to this store!—had been in the day before and had walked away with a Gilray that I had long wanted: the British opening China. Take heart, my friends, the man actually had a second copy—a later print, but a print nevertheless.

My most recent prints came when I was introduced to a lantern collector, having been told that he might be interested in selling his lanterns. He may well have been, be we couldn't agree on a price. He was, however, far more reasonable when it came to two extraordinary pieces: a beautiful French print and a large one-of-a-kind hand-made parchment poster for a lantern show....

Having written this piece, I have to say that there is something slightly absurd about collecting magic lantern ephemera. Collecting magic lanterns is esoteric enough, but collecting things about the lantern pushes the boundaries of eccentricity even further. But don't worry—during my last visit to England, I found someone whose collection of photographica is largely limited to stamps from around the world which depict cameras or photographic personalities. One person's absurdity is another's normalcy. The hunt is fun itself, and the pieces...well, they speak for themselves.

Dick Balzer has one of the most comprehensive collections of magic lantern ephemera in the world.

My Limelight was a Lemon—Part 3

Henry Clark

***The Magic Lantern Gazette*, Vol. 9, no. 2, Summer 1997**

I imagine everyone who performs magic lantern shows like to recount the story of the time he or she came close to making their audience vomit. I seem to have an overabundance of such stories, but the one that recurs to me even in my sleep is the one involving my treasured Marcy "Sciopticon."

I acquired my Sciopticon magic lantern from Richard Balzer....This particular lantern did not have the slanted-wick burner than made Sciopticons so special, although Richard did make a game attempt at convincing me it did by mounting several "Bic" butane cigarette lighters in a block of Play-Doh and sticking it inside. (Again, time is perhaps plays tricks with my memory. They may have been Zippo butane lighters.) Since possessing the original illuminant was of little concern to me, I was soon the happy owner of this classic lantern.

It improved my shows in the Old Bethpage Village schoolhouse immeasurably. I could now set up a magic lantern at the back of the room and project over the audience members' heads, rather than from their laps. And by bringing in my own lantern, I was finally able to prevail with the museum curators and use wall-socket electric light as an illuminant. I will not reveal the wattage of the bulb I finally selected, since I know there are some members of the Lantern Society who would blanche upon hearing of the use of anything over 20 watts. Actually, if these members were exposed to the light from the bulb I use, they would not blanche. They would tan. The first time I used the bulb to project a slip-slide of Abraham Lincoln, he slipped on sunglasses (150 watt Sylvania straight from the local supermarket, if you mush know. Its selection must have been an over-reaction to years of projecting with illuminants possessing the equivalent candle-power of phosphorescent paint. And to date, none of my slides has blistered or faded, although a few dissolving views have, in fact, dissolved.).....

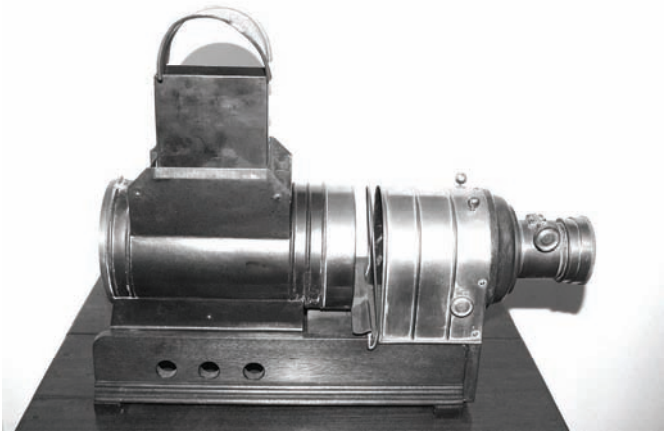
In May of 1990, I was asked to do a special show for Old Bethpage's annual Civil War Encampment. This is a very popular event in which re-enactors—hobbyists who dress up as Civil War soldiers, pitch tents, demonstrate camp life for the public, and, after hours, drink large quantities of beer—recreate the sights and sounds of Camp Winfield Scott, a Union Army training camp of 1863. I set up in the evening to do a lantern show for over a hundred men in Civil War uniforms and an equal number of women in hoop skirts and crinolines. Because the audience was so large, I was allowed to forego use of the Village schoolhouse and perform the show in the auditorium of the museum Reception Center. It was a warm spring evening. The doors were left open. Moths got in.

During the Civil War, the closest thing they had to a bug-zapper was any bored infantryman with a loaded musket. Fortunately, while most of the infantrymen watching my show were bored, I had long ago learned the wisdom of keeping firearms out of the hands of my audience, and had insisted they park their pieces outside.

At first, I didn't know why some of my images were shimmering. Then I realized one particular moth—a huge example, the Mother of All Moths—was trying to mate with the lantern's condenser. I would shoo the moth away, change slides, and it would return to renew the courtship. This went on for five or six slides and then I lost my head. I reached into the area between the condenser and the projecting lenses and swatted the moth right up against the glass of the slide.

I started to continue my spiel about the slide. I was interrupted by the sound of a hundred men in blue, many of whom claimed to have seen action at the bloody Battle of Antietam, all, in unison, "Ewwww!" The women were making gagging noises. I looked up at the screen to discover I was projecting a Japanese monster movie, "The Army of the Potomac vs. Mothra." The moth had stuck to the slide, and was not entirely dead yet. It fluttered feebly, dripping ichor onto the heads of the soldiers at Manassas, doing the death scene from Camille.

I pulled the slide as fast as I could. The sounds of repulsion from my audience suddenly turned into the sound of uproarious laughter. This was followed by thunderous applause. In all the years since, I have never gotten a better ovation, despite the hours I have spent working with a new generation of moths. The damned things are virtually untrainable.



A Marcy Sciopticon. Photo by K. D. Wells.

Henry Clark is a longtime member of our society who has contributed several humorous pieces about his adventures as a magic lantern showman.

The Magic Lantern Slide Set to Music: The Illustrated Song Slide

Nancy A. Bergh

***ML Bulletin*, vol. I, no. 4, January 1980**

Sound had been no stranger to magic lantern shows before 1885, but at that time in New York City, an audio-visual innovation was introduced. A new tearjerker ballad by the young song writing and publishing tem of Stern and Marks was presented at the Grand Opera House on 23rd St. and 8th Ave. by one of America's leading minstrel companies. The ballad, *The Little Lost Child: or, the Passing Policeman*, told in two verses and repeated refrains the poignant tale of a man in blue who finds a lost child and recognizes in her, and in the moth, his own long-lost wife and babe. When the company's lead singer, Allen May, performed the song, the lyrics were illustrated line by line with a series of photographic magic lantern slides projected upon a stage screen. This song became a big hit; soon all the major music publishers were jumping on the slide bandwagon.

The idea of using slides with music was not new. Many a temperance song or evening hymn had been accompanied by artists' renderings. Photographic illustrations, with live models posed in scenes to illustrate a song's story—these were a novelty!

Just as radio and television today function as major song-plugging devices, around the turn of the [20th] century, the illustrated song became the great promotional device for music publishers. Publishing houses commissioned photographic firms such as Scott and Van Altena of New York, DeWitt C. Wheeler of New York, and the Chicago Transparency Company of Chicago to produce sets of 14 to 18 slides. From 4 X 5 inch glass plate negatives, 3 ¼ X 4 inch positives were made by a reduction-projection process. The black-and-white slides were then tinted by hand. A guide was set by a master colorist and the rest were done by girls on a piece-work basis. A minimum order was usually fifty sets, for which the publisher paid three to five dollars per set. At first, slides were distributed by the publishers and their pluggers, but, as the novelty caught on, distribution was handled by film and slide exchanges at rental rates of one to two dollars a week. Sometimes film exchanges threw in the slides free of charge with a moving-picture rental.

Around 1905-1906, Nickelodeon movie houses, often nothing more than stores or halls with a white sheet or a plain wall as a screen, began to spring up all across the country. In them, in

Live-model song slides by Dewitt C. Wheeler (top) and Scott and Van Altena (bottom). Wells collection.

addition to serving as entertainment, the illustrated song satisfied a technical need. Nickelodeon managers equipped with but a single projector welcomed them as easy, inexpensive fillers for that uncomfortably-long "One Moment, Please, While the Operator Changes Reels."

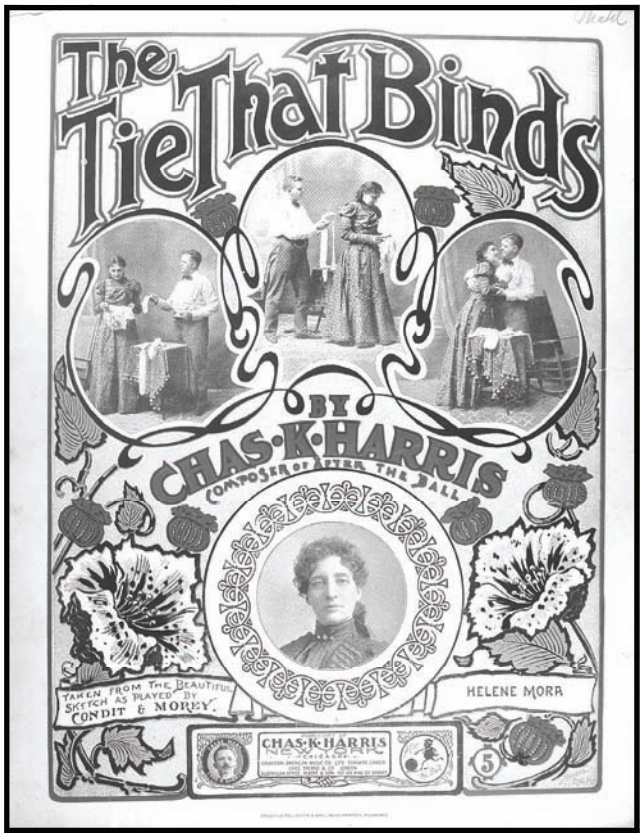
The better performers traveled with their own projectionists, to insure a minimum of inverted images, fumbled slides, or other disasters. The "lanternist" of such acts usually received billing equal to the vocalist's—and justifiably so. Synchronization of the glass slides with the singer's presentation was a very difficult feat, even with good cue sheets.

It was the singer who was called the "illustrator." He or she warbled through the first verse and chorus, each line coordinated with a colorful illustration. On the second time around, a slide urged the audience, "All Join in the Chorus!", and this was where the song-plugger really earned his wage. A slide with the printed words of the chorus would appear, and, if the singer were successful in leading the sing-along, the theater patrons would, theoretically, all rush to their local sheet music dealers to purchase copies.

Advertising blurbs on sheet music covers inevitably boasted of the song being introduced with "immense success" by the public's favorite song "illustrators"—often billed as teams, such as Maxwell & Simpson, the Silvers, and Bennett & Rich. Lantern slide "tie-ins" also contributed to sheet music "packaging." Single insert pictures or whole sets of song-slide illustrations were reproduced on the front or back covers, or on an inside page. Similarly, sets of song-slide illustrations were issued in postcard "song-series"—often in full color.

Among the most beautiful slides extant are those which were known in the trade as "effect slides." Painted backdrops had been the usual solution to the problem of illustrating out-of-season, until Scott and Van Altena brought the composite negative to the song-slide business. Their large collection of negatives of scenic locations enabled them to create "June-moon-spoon" scenes in wintertime, and snow scenes in July. Models posed before a black velvet backdrop; a negative of appropriate background scene was chosen, and unwanted areas stripped away. Sometimes as many as four glass-plate negative were superimposed to produce the 3 ¼ X 4 inch lantern slides. These special slides were extremely popular with audience and with reviewers, who often commented enthusiastically upon the novelties in the trade papers.

By 1915, the illustrated song was on the decline, edged out by the same advancing technological forces which had created it and its place in American life. The development of longer and better movies and the outfitting of theaters with two projectors eliminated the need for illustrated songs between reels. With increased popularity of the phonograph, people abandoned their parlor pianos and, as a result, sheet music sales declined. Music styles were changing too. A new dance craze swept the country, songs which told a story became "old hat," and the new tunes had tempos too fast for slides. By the time of the First World War, the live-model illustrated song had about run its course, although some use of art slides with organ music continued into the 1920s.


The Tie That Binds
BY
CHAS. K. HARRIS
COMPOSER OF "AFTER THE BALL"
TAKEN FROM THE BEAUTIFUL SKETCH AS PLAYED BY CONDIT & MOREY.
HELENE MORA
CHAS. K. HARRIS
NEW YORK CITY

Sheet music for popular songs often included images from live-model lantern slides that accompanied the songs in theaters, along with a portrait of the singer or song "illustrator." Wells collection.

Nancy Bergh and her sister Margaret were university students when Nancy contributed this article to the *ML Bulletin.* They amassed the largest collection of live-model song slides in the country (named the "Marnan" Collection, combining their names), which includes a huge collection formerly owned by song-slide expert John W. Ripley. They contributed a number of articles to our publications over the years. For recent scholarship on illustrated song slides, see Rick Altmann, *Silent Film Sound* (Columbia University Press, 2004), which includes color plates from the Marnan Collection. Live-model slides were particularly popular in Great Britain and were used to illustrate songs, poems, stories, and temperance lectures. *The Illustrated Bamforth Slide Catalogue* (Magic Lantern Society, 2009) includes a booklet and CD-rom catalogue of the most prolific British manufacturer of such slides. For other information on live-model slides, see also G. A. Household and L. M. H. Smith. *To Catch a Sunbeam: Victorian Reality Through the Magic Lantern* (Michael Joseph, London, 1979) and Steve Humphries, *Victorian Britain Through the Magic Lantern* (Sidgwick & Jackson, London, 1989).

Illumination in Magic Lanterns

W. Willeroy Wells

***ML Bulletin*, vol. V., no. 3, December, 1983**

Since the art of optical projection is primarily based on the manipulation of light, it is surprising that recent literature on the history of the magic lantern has so little to say on the sources and uses of light. Olive Cook and C. W. Ceram are almost totally silent on the subject. They talk about the origins of the lantern, the optical principles, the types of slides, the various uses of the lantern, and the development of motion pictures—but hardly a word about illumination. Martin Quigley has only a little to say about it.[1]

Fortunately, some early writers had a great deal more to say about the subject. From Quigley and several older sources, I have extracted a brief summary of the evolutionary stages in the development of magic lantern illuminants. Readers who have access to additional sources may wish to—if you will pardon the expression—throw more light on the subject.

Candle Light

Judging by very early illustrations, it would appear that the first magic lanterns used a single candle as the source of illumination. The diagram of Walgenstein's 1665 lantern shows a candle (Fig. 1). So does the diagram of Molyneaux's lantern of 1692 (Fig. 2). Since these are only diagrams, the candle might simply be a symbol for the light source. On the other hand, Quigley says that Kircher definitely used a candle in his 1645 lantern, and adds, "But Kircher evidently was not satisfied with this method, for no illustration of it appeared in the first edition of his book. The reason is obvious. A candle could provide only enough illumination for the faintest shadows."[2]

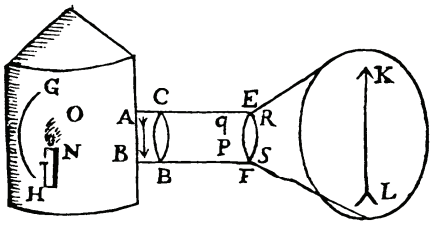


Fig. 1

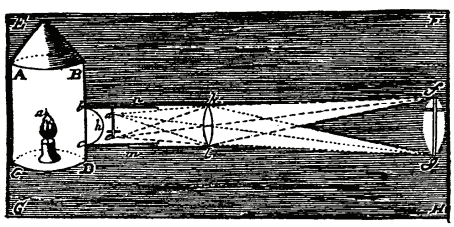


Fig. 2

Animal and Vegetable Oil

Oil lamps of various types soon replaced candles. In the 1671 edition of *Ars Magna Lucis et Umbrae*, Kircher does include an illustration of his lantern using a Roman style lamp as the light source (Fig. 3). Incidentally, this is the same puzzling illustration which shows the slide at the wrong end of the projection objective and image on the slide not inverted. Johann Zahn also shows a lamp as a light source in his 1685 lantern, which is said to be the first table model lantern (Fig. 4).

For the next 150 years, it appears that animal and vegetable oils were the primary light source for optical projection. Whale oil, fish oil, lard, and pine oil were among the most common. For home lighting, whale oil was widely used during the 18th and first half of the 19th century, and we may assume that it was also the principal illuminant in magic lanterns. The oil of the sperm whale gave the best light, but was more expensive than ordinary whale oil.

During this period, there was continuous effort to produce brighter light from oil lamps, both by improving the burners and by finding a better fuel. The Argand lamp, patented in 1783, gave more light through an improved burner and the addition of the glass chimney, which created a draft for better combustion. One of the new fuels introduced in the 19th century was crude oil found in some salt brine wells and in occasional surface oil springs. This substance gained some place as an ingredient in cure-all patent medicines, but its offensive odor and tendency to smoke hampered its acceptance as a lighting fuel.

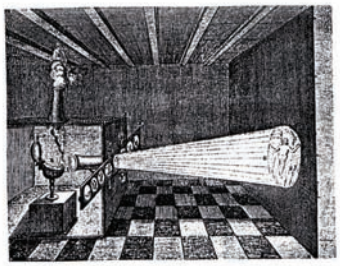


Fig. 3

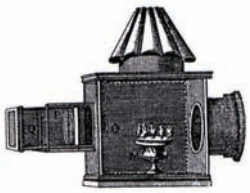


Fig. 4.

Kerosene

In 1859, Col. E. L. Drake drilled the first successful oil well in Titusville, Pennsylvania, and ushered in the great petroleum era. Oil refineries soon began supplying huge quantities of kerosene to households and industries. This was the big breakthrough in lighting fuel the world had been waiting for. Kerosene was both better and cheaper than whale oil, and lamp manufacturers lost no time in bringing out a wide variety of lamps designed for the new fuel. For the next forty years, kerosene dominated the lighting field, although in some urban areas, natural gas was a strong competitor.

It was during this period, 1860-1900, that the magic lantern had a great surge in popularity. It rapidly moved up from a seldom-seen curiosity to a familiar form of home entertainment and public instruction. We can only speculate about the role that the new fuel, kerosene, played in creating this new level of interest in the magic lantern. Certainly, there were other factors, including the development of photographic glass slides, but the new brighter light must have broadened the popularity and usefulness of optical projection. Lantern for home entertainment were usually designed for kerosene during this period. After all, the majority of Americans (72% in 1880) lived in rural areas, and kerosene could be bought in almost any country store.

Single-wick burners were common in the inexpensive home projectors, but there soon developed a demand for brighter light, especially for classrooms, churches, and lecture halls. Two-wick burners—then three-, four-, and five-wick burners—appeared in response to this demand. According to one writer, "The revolution in oil lamps commenced at the invention of the Sciopticon by Mr. L. J. Marcy of Philadelphia (Fig. 5), which burnt mineral oil (kerosene), with two wicks 1½ in. wide.... A third wick was then added (Fig. 6)...which has become with a little alteration, a stereotyped pattern throughout the trade."[3]

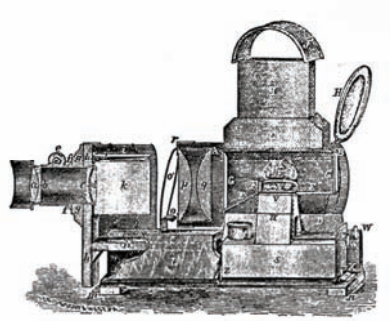


Fig. 5

Fig. 6

L. H. Laudy, writing in 1886, had high praise for the three-wick Triplexicon (Fig. 7), "which removes the dark central vertical line seen with those bearing two wicks.... Various other forms of oil lanterns are manufactured, some with four and even five wicks, but my experience has been that they add little to the intesity of the light, but largely to heat, which is a serious drawback to their introduciton." Professor Laudy adds, "For a circle of six or eight feet the oil lamp will give good results, and is well adapted for home or class projections. If intended to exhibit in a hall or large lecture-room, I would advise the use of oxy-calcium jet, which will illuminate a circle of twelve feet. If any larger circle is required, then introduce the hydrogen jet."[4]

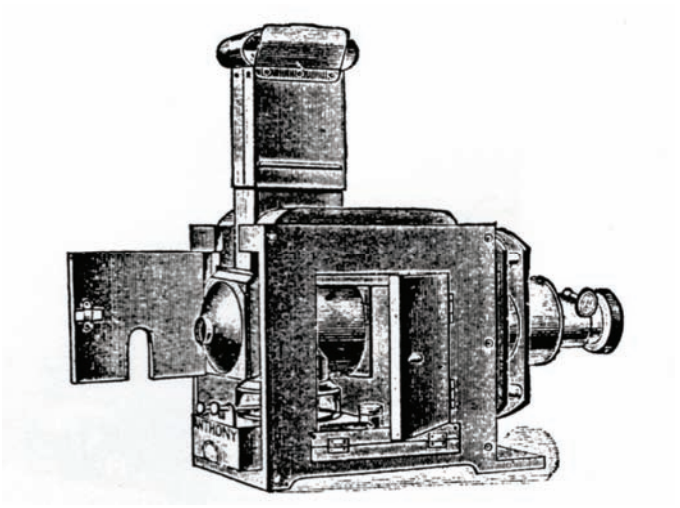


Fig. 7

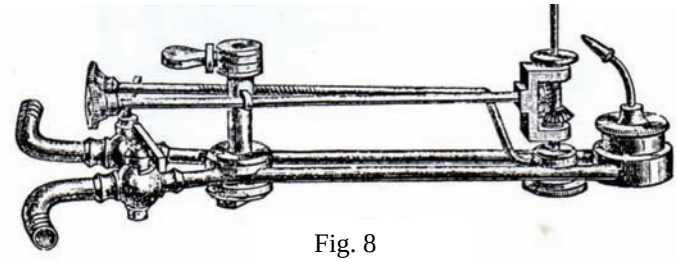


Fig. 8

Limelight

The oxy-hydrogen jet (Fig. 8) referred to above was commonly called limelight. It was first developed by Lieutenant Thomas Drummond in 1826 for a new signal light that could be seen for 100 miles. It is not known who first used it for the magic lantern. We do know that Professor Philipstahl used limelight for his famous Phantasmagoria in London's Lyceum Theatre in 1846. He had the slides for this extravaganza especially painted by an artist names H. L. Childe, who was an ardent lanternist and was the inventor of the chromatrope and the dissolving view using two lanterns.

During the 1840s, Mr. Childe was putting on spectacular lantern shows at the Polytechnic Institute. "Seven limelights and two oil lights were often used for some of the effects, which were originated and painted by Messrs. Childe and Hill, and about the same time the same gentlemen introduced limelight on Drury Lane stage for the first time during the period of Monsieur Leon and Madam Plunkett who danced the shadow dance, the dissolving view being also used to show a vision in a piece then being performed."[5] The term "in the limelight" came from its continued use in theater lighting following Mr. Childe's innovation at Drury Lane.

Lanternists originally had to manufacture their own hydrogen and oxygen, which were stored in rubber bags (Fig. 9) on the floor beneath the lantern. Small boys were sometimes hired to sit on the bags to create the desired pressure, but this was a hazardous procedure. In the April 1882 issue of *The Optical Magic Lantern Journal*, published in London, there is an account of an unfortunate lad being hurled into the air when a gas bag exploded. By 1886, metal cylinders (Fig. 10) containing oxygen and hydrogen were commercially available. The oxy-calcium jet referred to by Professor Laudy was identical to the oxy-hydrogen jet, except that the hydrogen was omitted.... The elegant English biunial and triunial dissolving lanterns (Fig. 11) so favored by professional lanternists and lecturers, were usually illuminated by oxy-hydrogen.

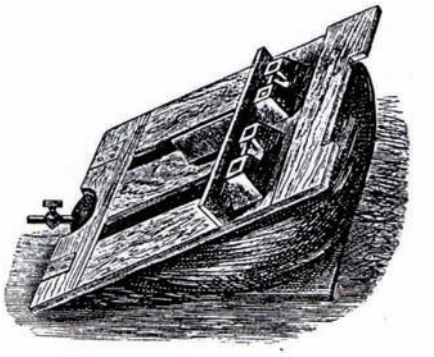


Fig. 9

Fig. 10

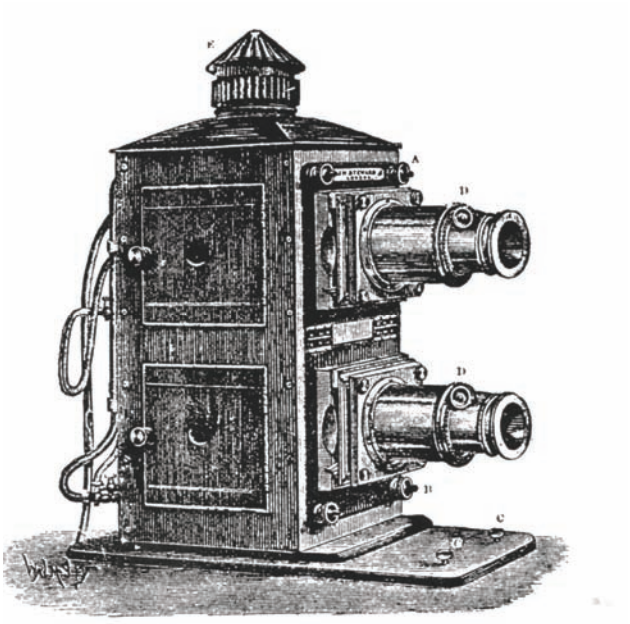


Fig. 11

Other Fuels

Simon and Henry Gage describe an acetylene lamp used in magic lanterns. "This may be from a house supply, a special generator or from a tank or cylinder.... The burners now used are in pairs. Two jets set at an angle give a fused flat flame. For the magic lantern the lamp has from one to four of these twin burners in a line."[6] The same authors describe a lantern illuminated with ordinary household gas, using a gas mantle lamp (Fig. 12). "The burner is of the Bunsen type. It heats the mantle to incandescence... There is a very brilliant light and a great deal of it."[7] The Gages also cite the use of alcohol with a mantle. "An alcohol flame burning in the air is very hot. This has been taken advantage of to heat a mantle to incandescence in the same was that illuminated gas [does]... The light is as intense or more intense than gas light with a mantle."[8]

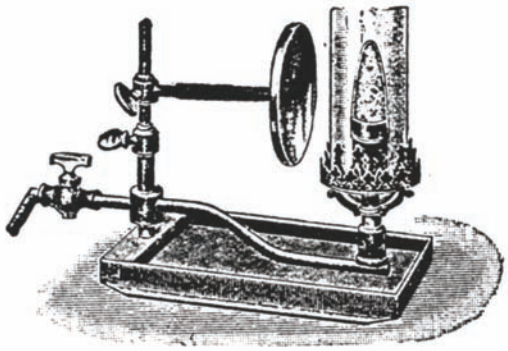


Fig. 12

Carbon Arc

I have shown how kerosene produced the first great revolution in magic lantern lighting and how limelight produced a second. Still a third revolution occurred when carbon arc lighting was applied to magic lanterns. In 1800, Humphrey Davy demonstrated how a very intense light could be produced by using electric current to create an arc between the tips of two carbon rods. It was not until 1846 that an actual carbon arc lamp was developed, and I am not sure when it was first used in magic lanterns. We do know that early users of this new light for optical projection had to carry around their own electric generators, because electricity was not widely available. Once electricity came into general use, carbon arc became the preferred method of projecting in large auditoriums. It came along just in time to serve as the standard light source for early motion picture projectors. The sputtering sound of the arcing was minimized when enclosed in a projection booth. By World War I, carbon arc lanterns and motion picture projectors were in widespread used in large lecture halls and in movie theaters.

Electricity Takes Over

All forms of optical projection quickly embraced electricity as the general source of illumination, whether with arc lamps, mazda lamps, or a variety of incandescent bulbs. With the tremendous growth of 35 mm color slide projection after World War II, a new breed of sophisticated projection lamps began to appear in modern magic lanterns. Perhaps I shouldn't honor these new-fangled projectors by calling them magic lanterns. For some of us, there will always be more magic in a three-burner Marcy sciopticon of 1866 or an oxy-hydrogen dissolving lantern of 1880 than in anything this high-tech age can produce.

Notes and References

1. Olive Cook, *Movement in Two Dimensions* (Hutchison, London, 1963); C. W. Ceram, *Archaeology of the Cinema* (Harcourt, Brace, and World, New York, 1965); Martin Quigley, Jr. *Magic Shadows* (Quigley Publishing Co., New York, 1960).

2. Quigley, p. 54.

3. An Expert, *The Art of Projection and Complete Magic Lantern Manual* (E. A. Beckett, London, 1893), p. 2.

4. L. H. Laudy, *The Magic Lantern and its Applications* (E. and H. T. Anthony, New York, 1886), p. 21.

5. An Expert, p. 3

6. Simon Henry Gage and Henry Phelps Gage, *Optical Projection* (Comstock Publishing Company, Ithaca, New York, 1914), p. 127.

7. Gage, p. 129.

8. Gage, p. 130.

W. Willeroy Wells (1911-2003) was the father of the current editor of the *Gazette*. He was the only member of the family who knew what a magic lantern was when we found the first one in 1960, and he became one of the most enthusiastic searchers for new lanterns and slides for many years. This article is the only major piece he contributed to our society publications. Although this article was published 26 years ago, it still provides a useful introduction to lantern illumination, especially for beginning collectors.

More recent scholarship on this subject includes: M. Lindsay Lambert (1991), "Limelight in a Magic Lantern, 1825," *The New Magic Lantern Journal*, vol. 6, no. 2, pp. 6-7; Damar Waddington (1995), "Illuminating Magic Lanterns," *Supplement to The New Magic Lantern Journal*, pp. 1-12; John Barnes (1997), "The History of the Magic Lantern," pp. 8-33 in D. Crompton, R. Franklin, and S. Herbert, eds., *Servants of Light: The Book of the Lantern* (Magic Lantern Society, London); M. Lindsay Lambert (1997), "Origins and Early History of Limelight," pp. 46-51 in *Servants of Light*; Richard Franklin (1997), "The Limelight Jet," pp. 52-57 in *Servants of Light.*

Robertson and His Phantasmagoria

Willem Tebra

***The Magic Lantern Bulletin*, Vol. VII, no. 4, March, 1986**

In the world of the magic lantern, Monsieur E. G. Robert is the phantasmagorist Robertson. His most important contribution was the reviving and refining of the phantasmagoria by means of a self-built magic lantern, even during the tumultuous days of the French Revolution. Etienne Gaspard Robert was born in 1763 near Liege (then part of the Southern Netherlands and today part of Belgium) and died in 1837 near Paris. His tomb is located in the famous Pére Lachaise Cemetery in Paris. The engraved slabs on his tomb mark the two important performances of his life: the phantasmagoria and his balloon ascents....

Portrait of an Era

In the two volumes [of his memoirs], Robertson described his life in a whirl of short stories. His anecdotes, however, are not presented as a history, and I believe most of the events were colored in such a way as to be easily digested in his time. Moreover, the form and content of the anecdotes not only create a certain atmosphere, but also make it possible to hide details behind the related events. For his time, he was a man of considerable education, a specialist in optics, and a calculating showman. Reading these memoirs, one is immersed in the 18th century. The Enlightenment in that period was (only apparently) interrupted by the French Revolution.

The portrait of this era was shaped by disbelief and irreverence. Many long-standing values were abandoned. The upper classes, while holding onto their privileges, turned from religion to the ideas of the Enlightenment and the logic of physics. Meanwhile, all society reveled in fantastic gimmicks and exotic imagery of eastern religions. Mozart's *Zauberflöte* [*The Magic Flute*], written in 1791, shows a mixture of these elements of reason and exotica.

The events of this period seem to have shocked Robertson very seriously. He saw the possibility of making a living out of the general interest in the "Physique Amusante." With his Physical Cabinet, a collection of apparatus comprising a small laboratory, he was allowed to give public demonstrations. Cautiously balanced between pride and enterprise, he tried to gather recognition and money. Luckily, he developed a reputation as a vigorous fighter against superstition.

In those days, Paris numbered half a million inhabitants and was a town that offered many different entertainments. Franz Mesmer gave his séances on animal magnetism, and

Francois Seraphin showed his famous *Ombres Chinoises* [Chinese shadows]. Many other performances, such as Galvinism, ballooning, and the Phantasmagoria, were really outstanding. Robertson tried to demonstrate that the illusions he presented obeyed simple physical laws. In those days, it was quite an honor to be referred to as a physicist who presented his experiments well. To date, however, it has been difficult to differentiate Robertson's activities from those of charlatans; his was a living on the shady fringes of respectability.

Secrets of the Phantasmagoria

In a roundabout way, Robertson's biographical anecdotes explained some of the secret of the Phantasmagoria. In reality, Robertson revealed to the reader a couple of principles, but no details. In Chapter VII, he explained why and how he became adept at the Phantasmagoria. When Robertson was in his twenties, he read about Athanasius Kircher's belief in the devil. Robertson did not take this belief seriously, because he had grown out of his superstition after reading *Recréation de Midorge* and the *Sciences Occultes*. The *Essais sur la Magie, les Prodiges et les Miracles* provided special insights, although he balanced between terror and disbelief. After a few weeks, he suppressed his terror and tried to call the devil, without success. This enterprise liberated him from this superstition once and for all.

He continued to study the stories of the underground vaults and the rites of Memphis and Trophonius [figures from Greek mythology]. Additionally, he studied the mysteries of Ceres [a Roman goddess] and Isis [an Egyptian god]. He was even acquainted with the mysterious story of Cagliostro [Count Alessandro di Cagliostro was an alias for the Italian occultist Giuseppe Balsamo (1743-1795)]. Because he had studied for the priesthood, these kinds of books were easily accessible to him. Afterall, he considered himself l'Abbé Robert.

The Phantasmagoria remained dormant in books until he read about the ancient Greek theater Nekymantion, and thus rediscovered the principles of a magic play with shadow figures. Until that moment, optics had just been interesting; now he had a purpose. In 1784, Robertson constructed a magic lantern according to instructions supplied by Kircher (*Ars Magna Lucis et Ombra*, 1671), Schott (1657), Viegleb, Zahn (1665) and others. M. Villette, a friend who practiced optics, helped him build a magic lantern with which he made some preliminary experiments. Robertson was clever with his hands; thanks to a course in painting, he was able to design his own slides. In 1783, the Swiss scientist Pierre Argand had improved the oil lamp, and Robertson probably adapted Argand's design to construct his own light source with a 5-inch diameter.

Following some initial performances for friends, he began is public lessons on physics at the Pavillon de l'Echiquier in Paris. Soon he added the Phantasmagoria to his program, and the public response was enthusiastic. He performed the show with the help of six men and several magic lanterns. After awhile, he moved to the more convenient Convent des Capucines. In 1798, he achieved success with his Phantasmagoria show, and in a few years, had made a fortune from it. When the Phantasmagoria was no longer profitable in Paris, he left Place de Vendôme and travelled through Europe, including Russia. This part of his life is marked by stories of his balloon ascents. Remarkably, his writings on this subject are far more lucid than those relating to his earlier adventures.

Robertson Himself

In several places, Robertson's memoirs describe the attempt of imitators to steal the secrets of his Phantasmagoria. Even in old age, he did not trust his readers enough to divulge his knowledge directly. His reasoning was rather alchemistic, and one has to accept his suspicious nature and circumspect language. Fig. 1 shows an old print of Robertson. Who was this man? I suppose he felt a little undervalued because he was not an invited member of l'Académie Royale des Sciences de Paris or l'Institut. Was this because Robertston had not followed an approved course, or because he was not a Frenchman? In connection with this, I suspect that Robertson had an influential enemy, probably his former tutor, Professor **[**Jacques Alexandre César**]** Charles. Some remarks in his writings lend credence to this theory. During the entire Phantasmagoria period, for instance, Robertson made no balloon ascents in France. Professor Charles invented the hydrogen balloon in 1783 and made ascents in collaboration with the brothers Robert, who were no relation to Robertson. Could this possibly be the main reason Etienne Gaspard Robert changed his name to Robertson?

Fig. 1. A reproduction of a physionotrace print of Robertson, from P. Delree.

The Fantascope

The Fantascope is a kind of magic lantern. Robertson described his Fantascope, patented in 1799 in more detail than the Phantasmagoria itself. A reconstruction of the apparatus according to the descriptions in his memoirs—done about 30 years later—is shown in Fig. 2. The lamphouse was made of walnut and measured about 40 X 30 X 20 inches. The interior was accessible by means of three apertures in the walls, each covered with black velvet to prevent the escape of unwanted light. A 4-inch circular aperture was cut in the front of the lamphouse on which the rectangular wooden lens tube (measuring 9 inches long and 5 inches wide) was mounted. A slide carrier was located between this tube and the lamphouse. Mounted on the inside of the lamphouse and protruding into the circular aperture was a thick, plano-convex condensing lens. The oil lamp, probably an Argand lamp provided with a parabolic reflector, was placed about 4 inches from the thick lens. The interior of the lamphouse was painted white. A chimney of bent iron stovepipe was placed on top. At the front of the lens tube, Robertson mounted a biconvex objective with a focal length of 9 inches, adjusted by rack and pinion. It was an invention of his own, and eliminated the difficult adjustments of the oil lamp that formerly were required. In approximately the middle of the tube, an adjustable diaphragm regulate the brightness of the image while the lantern was moved closer to or farther away from the screen. The diaphragm also worked as a shutter. It was made of two layers of brass, mounted like a pair of scissors, and operated by squeezing with a knob.

While the lantern was being moved, the operator must have paid close attention to the adjustments of objective and diaphragm. In later Phantasmagoria, someone—probably Thomas Young—added an ingenious connection between these adjustments by means of an eccentric and the wheels of the lantern. It was then possible to maintain both focus and light intensity automatically, even while moving. It is remarkable that in many publications, one can find a print of a double Fantascope lantern with these automatic adjustments, which represents a later improvement. Robertson employed four uprights to level his primitive Fantascope to a height of about 5 feet. The uprights, provided at the base with copper wheels, were guided by two rails fixed on the floor and perpendicular to the center of the screen.

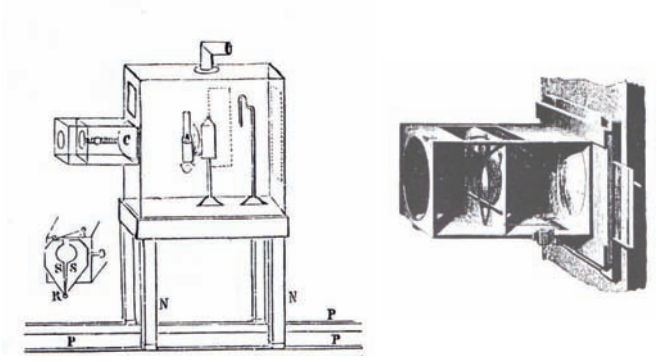


Fig. 2. Left: Sketch of the Fantascope, according to Robertson. Right: Part of the lens tube of a Fantascope.

The Building

In *Marion's Optiks*, C. W. Quin mentioned that "The old Capucine convent near Place Vendôme was more adapted to Robertson's purposes that the former Pavillon. It was in the middle of a vast cloister crowded with tombs and funeral tablets. It was approached by a series of dark passages decorated with weird and mysterious looking paintings and the very door was covered in hieroglyphs. The chapel itself was hung withy black velvet and feebly illuminated by a sepulchral lamp." An idea of this place is given in Fig. 3, from the title page of the first *Memoir*. Perhaps a picture really is worth a thousand words; this one wildly stimulates the imagination. But Robertson, his feet firmly on earth, remarked, "I needed a hall of at least 70 feet long and 40 feet large that was painted totally black. On one side there must be a section of at least 18 feet for a projection room, well-separated by a huge screen from the public. The screen was made of cotton, roughly 20 feet square and probably oiled or waxed to improve its translucence. Robertson called this screen "the mirror" because the image projected on it was a mirror image—that is, transposed left to right—to the public.

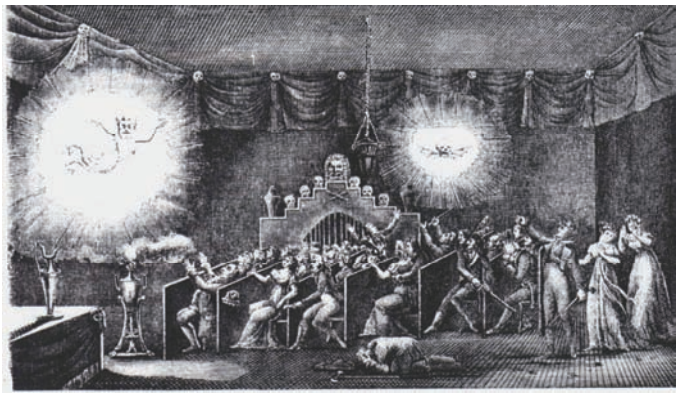


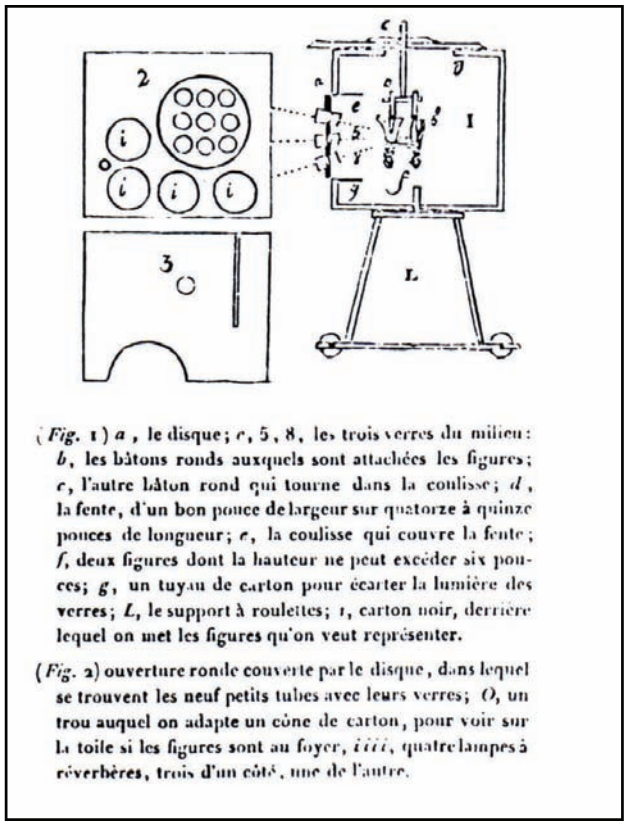
Fig. 3. The title page of the *Memoirs* provides an impression of a phantasmagoric séance.

Phantasmagoric Proceedings

A few attributes of the hall, the ambulant phantoms, the stationary creatures on the walls, and the tormentors in the corners are all depicted in Fig. 3. In reality, much of this was induced by the power of suggestion. The techniques were simple. The "dance of the sorcerers" was created by the principle depicted in Fig. 4. Multiplications and movement were achieved by means of several separately handled

light sources. Another technique for "dance of the sorcerers" is that given in Fig. 5. Here, the light source was fixed, but multiple images were created with several lenses, each aimed in a slightly different direction. The lenses were mounted on a rotating disk, and the projected image gave the impression of a merry-go-round. Further, the illuminated objects could also be turned around; the luminous picture must have been really impressive!

Fig. 4. The principle of the "dance of the sorcerers" is demonstrated with separate candles. When a lens is used, the image carrier must be inverted.



(*Fig.* 1) *a*, le disque; *e*, 5, 8, les trois verres du milieu: *b*, les bâtons ronds auxquels sont attachées les figures; *c*, l'autre bâton rond qui tourne dans la coulisse; *d*, la fente, d'un bon pouce de largeur sur quatorze à quinze pouces de longueur; *e*, la coulisse qui couvre la fente; *f*, deux figures dont la hauteur ne peut excéder six pouces; *g*, un tuyau de carton pour écarter la lumière des verres; *L*, le support à roulettes; *r*, carton noir, derrière lequel on met les figures qu'on veut représenter.

(*Fig.* 2) ouverture ronde couverte par le disque, dans lequel se trouvent les neuf petits tubes avec leurs verres; *O*, un trou auquel on adapte un cône de carton, pour voir sur la toile si les figures sont au foyer, *iiii*, quatre lampes à réverbères, trois d'un côté, une de l'autre.

Fig. 5. A more advanced technique is possible with this kind of apparatus.

When the public had flocked together in the big hall of the old convent, and Robertson had commanded attention, the silence was complete. He talked about the sensations called up by phantoms and witchcraft. He mentioned human interest in metaphysics and the possibility of conjuring forth the ghosts of famous men and women. When he ended his introduction, the old sepulchral lamps was suddenly extinguished, and the public was immersed in a thick murk. The sound of rain was heard, followed by thunder. Lightning flashed. The solemn bells of a church intoned danger, reinforced by a cold airstream flowing through the hall. When the sound of the bells faded away, an organ harassed the spectators. Just as the lightning seemed unendurable, a small light became visible in the distance. A human figure appeared, small at first, but coming nearer with small steps and growing larger. It was as if it were about to step into the audience, but just as the spectators were seized with unreasoning fear, the phantom suddenly disappeared.

One of Robertson's favorite programs was "Diogenes and his Lantern." The program is reproduced in Fig. 6. Diogenes is in search of a man, looking around and seemingly moving between the spectators. This illusion was so strong that ladies became upset, and everyone was therefore amused. During the Diogenes act, handwriting appeared on the wall. With a slip slide, Robertson projected the words "Je cherche un homme" [I search for a man], character by character, accompanied by a hand with a feather [pen]….

FANTASMAGORIE

DE ROBERT-SON,

Rue des Petits Champs, Cour des Capucines,

vis à vis la Place Vendome.

Fig. 6. Program of a phantasmagoria performance, from P. Delree.

Bibliography

Memoirs of Robertson, tome 1 and 2.

Pierre Delree, *Robertson, Physcien et Aeronaute Liegeois*. La Vie Wallone.

De Oude Tijd. J. Ter Gouw Haarlem, 1874.

Editor's Postscript

This is a re-edited and slightly abridged version of an article originally published in 1986. One of the illustrations in the original article has been omitted because the quality of reproduction was not adequate to reprint it here. **Willem Tebra** was a Dutch magic lantern collector and scholar who contributed a number of pieces to our society's publications, including a two-part article on the Dutch connection to early magic lantern history (*The Magic Lantern Gazette*, Vol. 9, no. 3 & 4, 1997), published after his death in 1996.

Robertson's phantasmagoria, and the phantasmagoria in general as a form of entertainment and a literary metaphor, has been the subject of considerable scholarly work. Important articles and books published since Tebra's article include the following: David Robinson (1986), "Robinson on Robertson," *The New Magic Lantern Journal*, vol. 4, no. 1-3 (*The Ten Year Book*), pp. 4-13; Hermann Hecht (1989), "The History of Projection I," *The New Magic Lantern Journal*, vol. 6, no. 1, pp. 1-4; X. Theodore Barber (1989), "Phantasmagorical Wonders: The Magic Lantern Ghost Show in Nineteenth Century America," *Film History*, vol. 3, pp. 73-86 [reprinted in *The Magic Lantern Gazette*, vol. 2, no. 1, Spring 1990, pp. 9-21]; Françoise Levie (1990), *Étienne-Gaspard Robertson, la Vie d'un Fantasmagore* (Le Preambule et Sofidoc, Brussels, Belgium); Mike Bartley (1995), "In Search of Robertson's Fantasmagorie," *The New Magic Lantern Journal*, vol.7, no. 3, pp. 1-5; Terry Castle (1995), "Phantasmagoria and the Metaphorics of Modern Reverie," pp. 140-167 in Terry Castle, *The Female Thermometer: 18th Century Culture and the Invention of the Uncanny* (Oxford University Press, New York); Laurent Mannoni (1996), "The Phantasmagoria," *Film History*, vol. 9, pp. 390-415; Thomas Weynants (1997), "The Fantasmagoria," pp. 58-69 in Dennis Crompton, Richard Franklin, and Stephen Herbert, eds., *Servants of Light: The Book of the Lantern* (Magic Lantern Society, London); Laurent Mannoni (2000), *The Great Art of Light and Shadow: Archaeology of the Cinema* (University of Exeter Press, Exeter, UK), pp. 136-175; Tom Gunning (2004), "Illusions Past and Future: The Phantasmagoria and Its Specters," *Media Art History Archives* (http://hdl.handle.net/10002/296); Mervyn Heard (2006), *Phantasmagoria: The Secret Life of the Magic Lantern* (The Projection Box, Hastings, UK); Marina Warner (2006), *Phantasmagoria: Spirit Visions, Metaphors, and Media into the Twenty-first Century* (Oxford University Press, New York); David Annwn (2008), "Returning to Fear: New Discoveries on Robertson's Fantasmagoria," *The New Magic Lantern Journal*, vol. 10, no. 4, pp. 59-64.

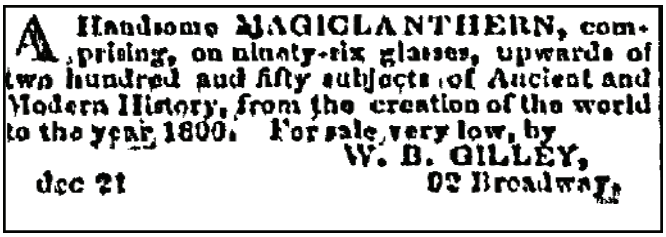
A Refresher on German Toy Lanterns

Joe Koch

***The Magic Lantern Gazette*, Vol. 6, no. 2, Summer 1994**

The focus for magic lantern production from the time of Kircher to the mid-nineteenth century was Europe, specifically Italy, France, and England. American consumers were forced to import these toys from abroad in order to satisfy their expensive taste for foreign novelties. Hand-painted sliders and the elaborate tin "Laterne Magique" with an architectural motif "a la Cathedrale" (circa 1830) were limited to wealthy households. It was an optical folly for the well-to-do.

An American newspaper, the *New York Commercial Advertiser*, posted a rare early notice in 1819 by W. B. Gilley, advertising a "Magic Lantern...96 glasses...upwards of 250 subjects...Ancient and Modern History from the Creation to 1806.[1]


A Handsome MAGIC LANTHERN, comprising, on ninety-six glasses, upwards of two hundred and fifty subjects of Ancient and Modern History, from the creation of the world to the year 1800. For sale very low, by
W. B. GILLEY,
dec 21 93 Broadway.

Advertisement by bookseller W. B. Gilley for "A Handsome MAGIC LANTHERN" in the *New York Commercial Advertiser*, January 5, 1820. [The *New York Commercial Advertiser* carried advertisements for "An Elegant Magic Lanthorn" for sale as early as July 20, 1801—**The Editor**].

By 1848, Benjamin Pike, Jr. a New York optician located at 294 Broadway, published a catalog which featured imported lenses and slides directly from London and Paris. But unlike the early ad by Gilley, Pike inferred that the *lanterns* were manufactured and packaged on his premises.[2] In all likelihood, this was the first example of an American firm manufacturing magic lanterns, even though the integral parts were imported [The firm of John M'Allister & Son of Philadelphia was advertising magic lanterns for sale as early as 1820, but it is not clear whether these were manufactured by this firm or imported from Europe; *Poulson's American Daily Advertiser*, October 11, 1820, p. 1--**The Editor**].

Presumably, importation of lanterns was now avoided with the advent of home manufacture. But unfortunately, the lowest priced magic lantern offered by Pike cost $5.50.[3] The price declined only with the mass production of the Industrial Revolution, which provide cheap goods in a large volume and made the magic lantern affordable to a greater portion of the population by 1860. The major supplier of magic lanterns from the mid-nineteenth century through the turn of the century was Germany. Thanks to German economic attitudes towards her manufacturing firms, the companies were able to supply French, English, and American consumers with a quality product at an inexpensive price. Government support made the German toy industry even more formidable, so that, aided by excise concessions, special rates for rail and sea transport, and even direct subsidies, German-made toys could be sold 30% cheaper in Paris and London than home-produced goods of equal quality.[4]

Nuremberg, the metal toy capital of the nineteenth century, flooded the market with inexpensive magic lanterns and chromolithographic slides. The companies directly profited from the high quality of German optics. The German machines sold most widely because of their superior optics.[5] Five Nuremberg firms especially influential in the production of magic lanterns were Ernst Planck, Gebruder Bing [Bing Brothers], Georges Carette, J. Falk, and Jean Schoener [A sixth major firm, not mentioned in this article, was Max Dannhorn—**The Editor**].

Toy magic lantern made by Max Dannhorn. The fancy scrollwork slide support is typical of vertical lanterns by this manufacturer. Wells collection

Ernst Planck

Despite competition at home and abroad, the firm of Ernst Planck retained the commercial lead in the industry. Active from 1866 to the 1930s, Planck assembled 150,000 magic lanterns in 1899 with a staff of 120 employees. As with most manufacturers of optical and mechanical devices, Planck diversified production by offering 80,000 "modeldampfmaschinen" (model steam engines, locomotives, ships, and electro-physical equipment).[6] Planck's stamped "Fabrikmarke" of a winged wheel, stars, and "E.P." became a familiar sight along with the lithographic label of King Ludwig II on the wood magic lantern case. The additional information "Made in Germany" included on the trademark was added after the McKinley Tariff Act of 1890, which required the country of origin to be stamped on all items imported into the United States.

Left: The "Gloria," a high quality toy lantern made by Ernst Planck in the 1890s. **Above:** Typical Ernst Planck trademark.

Ernst Planck box label, showing the firm's "winged wheel" trademark and award medals from various world's fairs and trade fairs. Wells collection.

Gebrüder Bing (Bing Brothers)

Ignaz and Adolf Bing established their toy company in 1888. It existed until 1934 under three trademarks: overlapping initials GBN in a circle or in a diamond, and a large W under two connected pentagon shapes. A 1908 supplement claimed that the Bing Brothers' firm was the "Greatest Toy Factory in the World," employing 3000 workers. In 1934, during the dissolution of the company, J. Falk purchased some of Bing's mechanical toy inventory. Bing Brothers sold the usual line of magic lantern goods: kerosene lantern kits, dissolving lanterns,[7] an assortment of lantern slides, and kinematographs.[8]

George Carette

George Carette, the son of a Parisian photographer, and a silent partner, Hopf, formed a mechanical toy business in 1886, which terminated in 1917 as a result of the World War. Their chief competitor was the Bing firm. Revealing an almost city-block-long factory on the c. 1911 catalog cover, Carette advertised oil, acetylene, and incandescent lanterns and kinematographs. The mark of a Carette product was either the overlapping initials "GC" with "&C" in the center, or an ornamental urn figure with "G.C" to the left and "C:N" to the right.[9]

J. Falk

With the trademark of a castle tower flanked by his initials, the firm of J. Falk prospered in Nuremburg from 1898 to 1935. Falk carried the regular line of lanterns, kinematographs, and slides. If his c. 1913 catalog can be used as a barometer, his projection department was quite overshadowed by his mechanical toys.[10]

Jean Schoener

The last Nuremburg firm of significance in the magic lantern industry was Jean Schoener. In 1875, the firm began with "three skilled assistants, likewise a painter on glass."[11] The last mentioned prepared colored slides for the magic lanterns, and things advanced so rapidly that after a year, the firm had acquired a 6 horsepower steam engine to drive the machine shop equipment. In 1887, this was joined by a 50 horsepower engine.

Although model steam engines seemed to have been the major seller, a good assortment of magic lanterns, sciopticons, and slides were offered in the 1905 catalog. By 1913, J. Falk catalogs were using the same cuts and serial numbers as Schoener, so presumably the firm of Jean Schoener changed hands at approximately that time.

The logos for Jean Schoener were a star, a wing attached to a wheel, and the initials "J.S." inside an oval.

High quality toy magic lantern made by Jean Schoener in the 1890s. The figure of Atlas holding up the slide support is characteristic of many vertical lanterns by this manufacturer, but the firm made many other models as well. Wells collection.

Jean Schoener box label, showing the firm's characteristic trademark and award medals from various world's fairs and trade fairs. Wells collection.

Notes and References

1. Antonia Fraser, *A History of Toys* (Delacorte Press, Frankfurt-am-Main, 1966).

2. Benjamin Pike, Jr., *Pike's Mathematical, Optical and Philosophical Instruments*, vol. 1. (Benjamin Pike, Jr., New York, 1848)

3. Pike, 1848 price list.

4. Jac Remise and Jean Fondin, *The Golden Age of Toys*, translated by D. B. Tubbs (New York Graphic Society, New York, 1967).

5. Ruth and Larry Freeman, *Calvacade of Toys* (Century House, New York, 1942).

6. Gustav Reder, *Clockwork, Steam and Electric: A History of Model Railways*, translated by C. H. Ellis (Ian Allan, London, 1972).

7. Carlernst Baecker and Dieter Haas, *Die Anderen Nurnberger Techniches Spielzeug* (Hobby Haas, Frankfurt-am-Main, 1973) has a reprint of the Bing Brothers 1902-04 catalog.

8. The early toy kinematographss had either a horizontal arrangement or a vertical spool to hold the celluloid film loop. Refer to the T. R. White Collection of German filmstrips at the International Museum of Photography, Rochester, New York.

9. Reder, *Clockwork.*

10. Baecker and Haas, *Die Anderen Nurenberger*.

11. Reder, *Clockwork*.

Joe Koch (1920-2000) was the founder of The Magic Lantern Society of the United States and Canada. He served as the first society Chairman from 1977 to 1984, and he co-edited *The Magic Lantern Gazette* with Jack Judson from 1992 to 1994. He contributed many articles on the history of the magic lantern to our publications. Since 2002, the Joe Koch Memorial Historical Award has been given at our conventions for outstanding presentations on magic lantern history.

Joe Koch's article on the Nuremberg manufacturers of toy magic lanterns was written at a time when finding information on manufacturers was quite difficult. The history of toy magic lanterns, and how they fit into magic lantern history in general, remains an under-researched topic. The best summary of Nuremberg magic lantern manufacturers is: Hauke Lange-Fuchs (1998), "Nuremberg Magic Lantern Production," *The New Magic Lantern Journal*, vol. 8, no. 3, pp. 6-13. Several books written by collectors, mostly in languages other than English, provide useful information about toy lantern manufacturers: Jac Remise, Pascale Remise, and Regis van de Walle (1979), *Magie Lumineuse* (Balland, Paris); Ernst Hrabalek (1985), *Laterna Magica: Zauberwelt und Faszination des optischen Spielzeugs* (Keyser, Munich); *La Lanterne Magiche: La collezione Minici Zotti* (Cataloghi Marsilio, Venice, 1988). Other useful sources include: Stephen Herbert (1987), "German Home and Toy Magic Lantern-Cinematographs," *The New Magic Lantern Journal*, vol. 5, no. 2, pp. 11-15; Roberta Basano (1996), "The Magic Lantern as a Toy," *The New Magic Lantern Journal*, vol. 8, no. 1, pp. 8-10; Deac Rossell (1997), "Some German Professional Magic Lanterns, pp. 70-77 in Dennis Crompton, Richard Franklin, and Stephen Herbert, eds., *Servants of Light: The Book of the Lantern* (Magic Lantern Society, London); Helmut Wälde (2008), "Toy Ghost Machines Made in Nuremberg," *The New Magic Lantern Journal*, vol. 10, no. 4, pp. 69-73. For a scholarly history of the German toy industry, see David D. Hamlin (2007), *Work and Play: The Production and Consumption of Toys in Germany, 1870-1914* (University of Michigan Press, Ann Arbor, Michigan).

Outdoor Magic Lantern Projection

Joe Koch

***The Magic Lantern Gazette*, Vol. 6, no. 2, Summer 1994**

At the turn of the [20th] century, voters crowded outside New York City's World Building in true Times Square fashion to watch six electric Criterion Lanterns flash election tallies. It was November 3, 1896, and the race of the Presidency was between Democrat [William Jennings Bryan] and Republican [William McKinley].

A forty-foot tower opposite the World Building's screen held the projectors, operators, slide-maker, and the telegraph. The projection followed the procedure described in the 1897 catalog of J. B. Colt and Company, the manufacturer of the Criterion lanterns.

As returns from various parts of the country were received, they were telegraphed to the tower, transcribed by typewriter, and put on glass by the slide-maker; the lantern slide was then passed to the floor above, placed in a lantern, and flashed on the screen in letters several feet high. It was estimated that there were more than 100,000 people watching these returns. Six projectors burning for eight consecutive hours illuminated a pair of circular discs sixty feet in diameter, and four rectangular images. The polictical returns flooded the 180 X 60 foot outdoor screen.

Cellophane slides were used to project the typewritten messages. Cellophane was simply put into contact with carbon paper and placed in a typewriter geared for stencil. The message was typed, the carbon paper was removed, and the cellophane sandwiched in glass. When the last ballot was counted and the decisive slide projected, [McKinley] supporters were ecstatic.

Election returns being projected in New York City, April 3, 1896. From *Harper's Weekly*, April 14, 1896, p. 1116. Wells collection.

Besides election returns, street projections kept passers-by informed on ballgames, regattas, horse races, and daily news. Commercial businesses also advertised from rooftop projectors in the evening hours. Photographic transparencies of business cards promised a “clear profit to the local advertiser." There were those clever appeals to the consumer who refused to be buttered-up.

When businesses realized that captive audiences in packed movie theaters were potential customers, advertising slides were moved indoors. Stock advertising slides were interspersed with comic slides, local scenes, or moving pictures. Lantern slide companies offered the florist, jeweler, ice cream parlor, grocer, haberdasher, farm implement supplier, and others standardized messages and illustrations, with space for the local merchant’s name and address.

The screen flashed with local commercials, such as:

Get the boys together
Come down and enjoy a game of Billiards
At Moriarty’s Billiard Parlor

We are all puffed up
about our Bakery Goods
Give us a Trial.
Cook’s Bakery

The castles in the air which
the poor man dreams of would
become real Castles if he started
a Savings Account.
Boston Ten Cent Savings Bank

Square Yourself with the Girl
by sending her a box of our
Delicious Candies.
Chacona’s Best

You furnish the Girl
and We’ll Furnish the Home.
Courteous Treatment and
Honest FURNITURE.
Shaker’s Furniture.

MEALS
Like Mother used to make.
At the Adams House—
Draymen Eat Here.

We don’t want to
Hog the Market,
But we do try to Market the Hog.
For Fresh Meat,
Metzger’s Shop.

References

1. J. B. Colt catalog, 1897, p. ix.

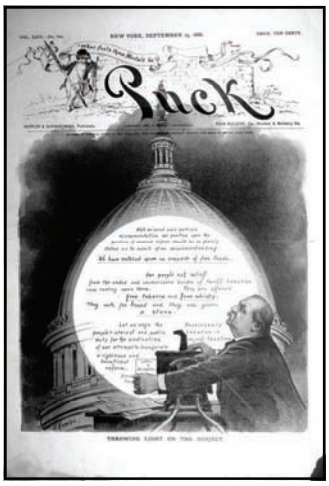
2. Edgar Dale, *Audio-Visual Methods in Teaching* (The Dryden Press, New York, 1946).

3. Robert and Fellows, *Catalog and Price List*, Philadelphia, 1889, p. 3.

4. Moore, Bond & Co., 1909 catalog, p. 199.

5. Exhibition Supply Company, pp. 156-166.

Editor's Postscript—Joe Koch's brief article on outdoor projection introduces a topic that has scarcely been addressed by magic lantern scholars. Outdoor projection has a long history, with the early traveling Savoyards often presenting magic lantern shows on the sides of buildings. The development of very bright illuminants, such as limelight and carbon arc lights, in the 19th century made it possible for images to be projected on walls and buildings at very large sizes and from some distance away. Projecting election returns was a common practice at least by the 1870s. In Brooklyn, for example, the *Brooklyn Daily Eagle* newspaper regularly announced multiple sites where election returns would be projected by means of stereopticons. By 1900, stereopticon projections, billboards, and other forms of outdoor advertising had proliferated to the point that John DeWitt Warner wrote an article entitled "Advertising Run Mad" (*Municipal Affairs*, vol. 4, no. 2, June, 1900, pp. 267-293). In it, he warned that "Ours is a world in which our cities and our rural districts, our most beautiful and striking scenery, and not merely our highways but our byways, things sacred as well as common, have become signboards by which, with every device of color, every possible use of light, one tradesman after another attempts to put others into the background and to force himself and his wares upon our notice." Fortunately, he said, "Grant's Tomb has not yet been used as a display board for magic lantern puffs; and neither of Trinity nor of any other of our public buildings is the view seriously marred by advertising signs."



This 1888 political cartoon of President Grover Cleveland projecting information on the Capitol with a magic lantern exploits public familiarity with the use of outdoor projection for reporting election returns and for advertising. Wells collection.

The Magic Lantern in Church

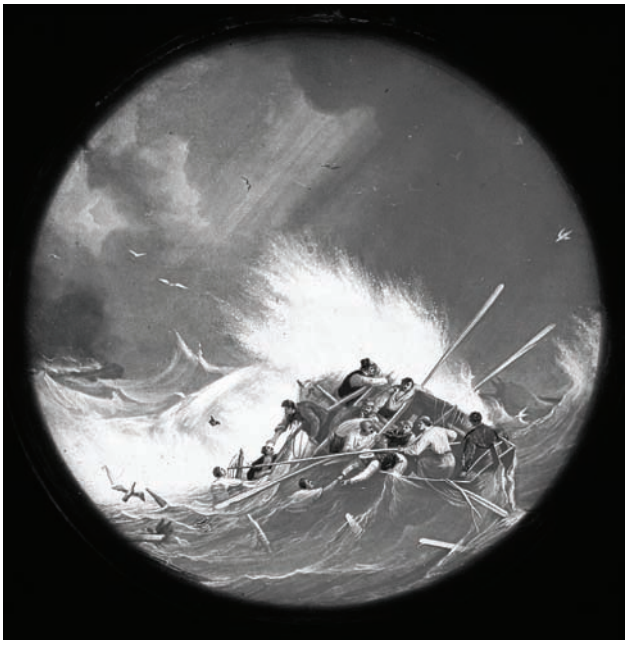
David Brooke

***ML Bulletin*, Vol. II, no. 3, September 1980**

The well-known author Robert Louis Stevenson employed the lantern...in Polynesia, where some of his audience observed that the events described in the Bible must indeed have happened, since they had just seen the pictures.... Ministers at home had to use the lantern with more discretion than missionaries abroad, and I felt I should pass on to the Society some of the correspondence I have gathered on this subject from various issues of *The Optical Magic Lantern Journal* of the 1890s.

The Reverend W. H. Young of Athens, Georgia, tackled the problem with directness and ingenuity:

> Many good people in pulpit and pew regard the lantern as an intruder into any church...[but] lantern services are never troubled with empty seats or sleepy occupants. Scripture also justifies the lantern sermon. Is it not eminently scriptural to bring scenes and objects into religious addresses? Did not Jesus use actual objects and scenes—the Roman denarius, the fig tree, the lily of the valley, etc.? In the Old Testament, very many scenes and objects were used by command of God, so that visible illustration of sermons is directly authorized in scripture...the Burning Bush, etc. Is it not quite as scriptural to show the scenes so that every person shall get a clear and perfect idea—using the divinely best owned genius of the best artists—even though the lantern has to be employed? But someone may object that there never was any use of screens, or light, or colours in scriptural scenes. Let us see!
>
> Take Genesis ix., 12-17. There is the screen of rain drops upon which the very best illuminant, sunshine, is projecting that most brilliant and effective of coloured pictures.
>
> So in Exodus xiv., 19-24, we have an "effect" slide that no lanternist can yet control. There is the fiery-cloudy pillar, dazzling bright on none side and inky black on the other, through which was the face of God peering at the Egyptians in terrible anger.
>
> In I. Kings xviii., 43-45, we have dissolving view effects. First, the brazen sea during that prolonged drought; then a little fleck of cloud is seen, which rapidly grows larger, followed by that terrible rain storm.
>
> But if some realist asks for an actual screen, let him turn to Daniel v., 5, where a plaster wall is used—and no better screen has since been invented. Pretty soon there appeared upon this ideal screen the fingers of an immense hand hold a reed-pen and writing those mysterious words.



Religious scenes were among the most popular of all magic lantern images. Here we see a boat in a storm-tossed sea. Wells collection.

The Reverend C. H. Woolston of the East Baptist Church in Philadelphia enjoyed conspicuous success with his Sunday evening services and his lectures, which were given in a hall handsomely fitted with 946 assembly chairs and illuminated by 169 electric lamps. After 13 years of lantern work, Woolston formulated the following Creed:

> I believe:
>
> 1. In the sacred use of the Lantern.

2. The Lantern has come to stay.

3. An ounce of picture is worth a ton of talk.

4. Sound often goes in one ear and out the other, but a picture never goes in one eye and out the other.

5. Solomon said: "The hearing ear and seeing eye, the Lord hath made even both of them."—Prov. xx, 12. I believe in using them both, and the Lantern is my agent.

6. The Old Testament "Rainbow" was a picture on the sky—the first Lantern slide.

7. That when Abraham was shown the stars, and told to count them, the Lord was reaching his heart by the eye gate and ear gate combined—this is all the Lantern will do. It was good enough for Abraham, it is good enough for me.

8. That on the third day the Lord came down in sight of all the people upon Mt. Sinai—it was a picture of light and fire—and the Lantern made shining the truth "in sight of all the people."

9. It brings the children to church, and they understand the truth.

10. It helps the believer; catches the eye and heart of the unsaved.

11. It is God's work in God's way. Come and see.

.

The phenomenon of lantern services was by no means confined to these shores. The Reverend Edgar of Wesleyan Church in Melbourne, Australia, drew more than 2000 people to his monthly lantern services, and hundreds had to be turned away. In London, the rector of St. Mark's in Kensington "advertised" his services by back-projecting slides of the Life of Christ on a huge screen stretched across the portico of his church. The crowds which gathered in the street were rallied by the singing of a hymn and then invited to come inside for service.

The prize for ingenuity must, however, remain with the United States. In an article in *The Optical Magic Lantern Journal*, Mr. Hugh Gatesby described lantern services he had attended in the United States in which photographs of life models were all taken either by the minister or by his son:

> In England they seem to arrange matters in a quiet unassuming way, but in America there is a certain amount of dash about them.... As far as my memory carries me, the parson himself, posed in suitable pose and garbed in suitable garb, represented some good man. His wife, daughters and sons also figured largely in the *tableaux vivant*-looking sort of groups. Possibly he had conscientious scruples about allowing any of his own family to appear as the devil, for this personification, I was informed, was represented by his manservant or butler, and I must admit that, dressed as he was, he made a very good devil, complete in every respect, including tail and pitchfork. One thing, however, was very noticeable, and that was that in the life model slides, the minister's family represented the good and shining lights mentioned in the Bible, and that all the questionable characters were either photographs of his friends or his servants.

The magic lantern literature is replete with accounts of dramatic conversions precipitated by such moving scenes as a drowning maiden clinging to the Rock of Ages. In the *Saturday Evening Post* of May 24, 1930, Chet Shafer recalled a showing at his local church:

> Vitalized by buzzing, sputtering carbons, its long-ghostish grey, dust-flecked eye angled out from a Cyclopean eye to a rippled bed sheet stretched on a wire in front of the choir loft. The sheet was furnished by the Ladies Aid Society. And it was a good one, too; probably off a spare bed... The views flashed on in profusion. Then, at the very last, came the peerless gem... Before the eyes of everyone was a beautiful

> though anguished maiden...who clutched despairingly but with evident determination to a rugged cross. Fascinating it its flickering fearfulness, fearful in its powerful significance for those who may have erred or were thinking about it, that picture...gave folks something to think about and carry home after the lighter and more worldly views had gone before.
>
> Perhaps all is not forgotten even today! I am reliably informed that a dealer in stereopticons on Bromfield Street, once the Mecca of lanternists in Boston, has a large supply of religious slides which are still lent on occasion to church groups.

I would like to end my modest contribution of "voices from the past" by sharing with you some of the testimonials received by the Gospel Lantern Mission of Christ to the Unconverted (in London). These testimonials range from ecstatic witness to the conversionary power of the lantern ("The music and pictures broke down my infidel philosophy; I felt as if I was there walking with Christ") to a grateful recognition of the benefits it could bring to the church and its collection boxes ("Our minister is sharp, and he saw the advantage of lantern work"). In these days of divorce and social disrepair, it is especially pleasant to recall the remark of one enthusiastic family: "We have not had time to quarrel since we had the lantern."

David Brooke was the Director of the Sterling and Francine Art Institute in Williamstown, Massachusetts. Now retired, he is still a member of the society and lives in New Jersey. His article touches on a subject that has received relatively little attention, despite the abundance of religious lantern slides. For an interesting look at the use of religious slides in Britain, see Richard Crangle (2005), "Mission Unaccomplished: W. T. Stead, Charles W. Hastings, and the Magic Lantern Mission," pp. 174-184 in Richard Crangle, Mervyn Heard, and Ine van Dooren, eds., *Realms of Light: Uses and Perceptions of the Magic Lantern from the 17th to the 21st Century* (Magic Lantern Society, London) and Stephen Bottomore (2002), "Projecting for the Lord: The Work of Wilson Carlile," *Film History*, vol. 14, pp. 195-209.

The Intersection of Technology and Religion: Magic Lantern Hymn Slides

Cheryl C. Boots

***The Magic Lantern Gazette*, Vol. 5, no. 2, Summer 1993**

Twentieth-century magic lantern slide enthusiasts often deprecate Victorian hymn texts and illustrations. They are not amusing, and many of them appear stilted at best. One British writer, David Robinson, characterizes them as "cheerless and dispiriting." He summarily dismisses English hymn slides, maintaining that, "All those hymns—even with added pictures...even when coloured to a high standard, as many of them were, have, alas, little to commend themselves as slides, whatever religious or sociological interest they may have.

While Robinson's assessment is accurate artistically for many hymn slides, he underestimates the active cultural and historical context in which magic lantern slides and Protestantism intersect in nineteenth century America. Charles Finney's call for "new men, new methods" during the Second Great Awakening [1790s-1840s] opened the door for innovative techniques in later evangelizing movements. The American Sunday School Union, found in 1824, experienced a resurgence after the Civil War. The YMCA and YWCA "entered upon their half-century of greatest vitality and usefulness during the 1870s" (Ahlstrom, p. 742). The Moody-Sankey revivals, which spanned both sides of the Atlantic (England: 1873-1875; America: 1876-1892), elevated music's position to full-fledged partner in religious conversion efforts. All this urban missionizing corresponded with the availability and affordability of magic lanterns and slides.

Information about the use of lantern presentations in American churches is sparse and scattered. Company catalogs and existing slides provide some interpretative material. Of four trade catalogs for companies in Boston, New York, and Philadelphia during the years 1874 to 1900, one hymn, "Rock of Ages," appears in all four catalogs. This popular hymn shows some intriguing changes and developments over the last quarter of the century.

"Rock of Ages" started as a two-slide set of illustrations. It expanded to twelve slides and included slides for dramatic effect (lightning, rainbow, and beckoning angels), while extending the plot line into heavenly scenes. One catalog implies a degree of market segmentation by offering and inexpensive slide in addition to the high quality pictorial series. Because the catalogs come from three different northeastern cities at four different times, I hesitate to

Lantern slide by Joseph Boggs Beale from the hymn set "Rock of Ages." Terry Borton collection.

speculate about comparative slide costs. I presume many more companies in these and other cities offered magic lantern slides. Therefore, prices could vary over time within cities, as well as across national regions. A single slide could be purchased for as little as fifty cents. High quality color slides could cost as much as $2.50 each.

C. T. Milligan's company catalog of 1881 avows that "during the past few years [the magic lantern] has rapidly assumed a foremost position among the indispensable appliances of the Academy, the Lecture-room, and the Sunday school" (Milligan catalog, p. 31). A drawing from *Frank Leslie's Illustrated Weekly Newspaper* dated March 8, 1879, confirms that magic lanterns were used in churches. The accompanying article reveals that magic lanterns were "first adopted as a new idea in [Sunday] school entertainment." This led to incorporation into adult "congregational singing in a number of [Boston] churches. Where this innovation is made there is no reason why one who can sing won't sing. The objections of having no book, or of having left the book at home, or of eye-trying fine type, are annihilated."

During the nineteenth century, magic lantern slides in general, and hymn slides specifically, promulgated Protestant culture and middle class values in their public and private use. At home, magic lantern slides taught hymns to children, thus entertaining and educating them within the family circle. Magic lanterns provided a venue for visual literacy, "a vital component of nineteenth century pedagogy" (Wajda, p. 114). Where the Centennial Exhibition encapsulated history and world cultures through pictures (Wajda, p. 114), hymn slides captured theological beliefs and religious tenets in illustrations.

Cultural historian Susan Tamke relates Victorian hymn texts to prevailing social attitudes of the period. Tamke emphasizes the dominant influence of evangelicalism on nineteenth century hymnody. Three essential tenets impact the worshippers, and, no surprisingly, their religious music: (1) the supremacy of Biblical authority, (2) the centrality of Christ's atonement, and (3) the individual experience of conversion and salvation. In addition to conveying foundational beliefs for evangelical Protestants, Tamke asserts that hymns express behavioral norms for believers. These include vigorous work (often outreach to sinners), rest in heaven after a busy life, temporality, self-help, and struggle. Victorian hymns play upon dualities: dark and light, blindness and sight, sickness and health, weakness and strength. Hymn texts also idealize the family. Despite increasing urbanization and industrialization at the end of the nineteenth century, agrarian images abound in Victorian hymns and illustrations. Yearning for the pastoral past, however, retarded Victorian Protestants from forming, in Tamke's words, "a social philosophy which could realistically cope with industrial conditions" (Tamke, p. 146). In this same sense, magic lantern hymn slides posed problems as well as possibilities for the Victorian audience.

Magic lanterns technologically and programmatically attracted observers, as the article in *Frank Leslie's Illustrated Newspaper* explained. Hymn slides transformed bystanders into participants. If new converts did not know the words, slides with verbal texts taught them as they lifted their eyes

Lantern slide of "Rock of Ages" by Joseph Boggs Beale. Terry Borton collection.

Lantern slide of "Rock of Ages" by Joseph Boggs Beale.
Terry Borton collection.

above the crowd. This performance practice moved individuals symbolically into a communal experience (especially when compared to singing with your face buried in your own hymnbook). Again, because of the Victorian emphasis on visual learning, magic lantern slides legitimized and reinforced middle-class values conveyed in the hymns. Imagine a darkened room where a ship appears to toss in a roiling sea. Lightning flashes split the sky. Accompanied by voices communally lifted in song, the sense of danger followed by dazzling heavenly intervention powerfully melds textual, visual, and aural messages. The impact of such moments in the life of a family, or a congregation, should not be underestimated.

Rock of Ages

Rock of Ages, cleft for me,
Let me hide myself in Thee;
Let the water and the blood,
From Thy riven side which flow'd,
Be of sin the double cure,
Save me from its guilt and pow'r.

Not the labor of my hands
Can fulfill Thy law's demands;
Could my zeal no respite know,
Could my tears forever flow,
All for sin could not atone;
Thou must save, and Thou alone.

Nothing in my hand I bring,
Simply to Thy cross I cling;
Naked, come to Thee for dress,
Helpless, look to Thee for grace;
Foul, I to the fountain fly,
Wash me, Savior, or I die.

While I draw this fleeting breath
When mine eyes shall close in death,
When I soar to worlds unknown,
See Thee on Thy judgment throne,
Rock of Ages, cleft for me,
Let me hide myself in Thee.

["Rock of Ages" was originally composed by Englishman Augustus M. Toplady in 1776, with various musical scores in the 19th century, including that by American Thomas Hastings in 1830—**The Editor**]

Joseph Boggs Beale, an artist for Frank Leslie's publications and a free-lance magic lantern illustrator, drew a series of images for "Rock of Ages." Catalog descriptions of the slides name the female figure, appropriately enough, "Faith." Many of the central figures in hymn illustrations were female, which supports the cultural notion that Victorian women were the principal characters in matters of religion. We also see that the angels are either feminine or asexual. The heavenly Jesus appears ethereal, hardly a rugged carpenter.

Lantern slide of "Rock of Ages" by Joseph Boggs Beale.
Terry Borton collection.

Dualities of light and dark leap out of the illustrations, notably in the blackness of the water and earth compared with the brightness of the angels and heaven. In the text, the third verse underscores dualities: "naked...dress," "Helpless...grace," "Foul...wash." While "Rock of Ages" does not present many overt behavioral prescriptions, it presents a sense of struggle in earthly existence, of the brevity of human life, and of heavenly respite. The entire text revolves upon the centrality of Christ's atonement and the individual experience of conversion and salvation. In this single example of magic lantern hymn slides, we can glimpse the visual potency for Victorian viewers. The spiritual message is reinforced through the text, the images, and the performance.

One of the Victorian-era visual technologies, magic lanterns, impacted homes, schools, and even churches. Special effects dazzled audiences and transported them to worlds real and imaginary. In churches, missions, and Sunday Schools, lantern slides gave congregations the opportunity to visualize hymns through specific, emotion-filled images. Projected texts taught words, and, thereby, values and behaviors. Magic lantern slides also freed singers from individual hymnbooks, enabling them to sing while sitting or standing erect, head held high. This performance practice fostered a sense of community by blurring distinctions between rich and poor, new converts and established believers, young and old. While magic lantern hymn-slide study is relatively unexplored, the evidence suggests an intriguingly complex interaction between technology and culture at this intersection of religion, family, and stereopticons.

Sources Cited

Sidney Ahlstrom, *A Religious History of the American People* (Yale University Press, New Haven, Connecticut, 1972).

David Robinson, "Introduction to shows and slides," in: Dennis Crompton, David Henry, and Stephen Herbert, eds, *Magic Images: The Art of Hand-Painted and Photographic Lantern Slides* (The Magic Lantern Society, London, 1990).

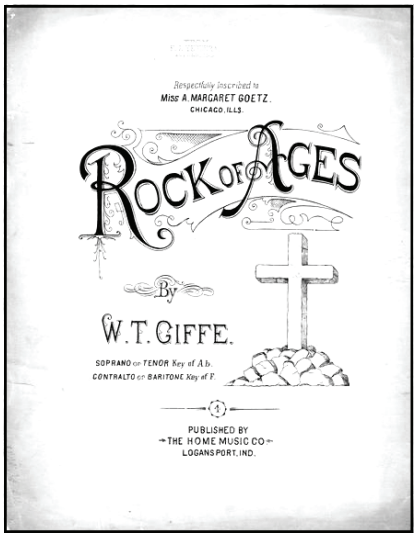
"Singing by Magic Lantern Displays," *Frank Leslie's Illustrated Newspaper*, March 8, 1879, pp. 5, 7.

Susan S. Tamke, *Make a Joyful Noise Unto the Lord: Hymns as a Reflection of Victorian Social Attitudes* (Ohio University Press, Athens, Ohio, 1978).

Shirley T. Wajda, "A Room with a Viewer: The Parlor Stereoscope, Comic Stereographs, and the Psychic Role of Play in Victorian America," in: Katherine Grover, ed. *Hard at Play: Leisure in America, 1840-1940* (University of Massachusetts Press, Amherst, 1992), pp. 112-138.

Trade catalogs: Jesse S. Cheyney, New York, 1876; Thomas Hall, Boston, 1874; Sidney Herbert, Boston, c. 1900; C. T. Milligan, Philadelphia, 1881.

Cheryl C. Boots is an Assistant Professor of Humanities at Boston University, where she teaches courses in American History and American Literature. She is working on a book, *Recovering Lost Soundtracks: Protestant Sacred Music and the Struggles for Multiracial American Identity before the Civil War*, which examines the ways that social reformers in the late eighteenth and early nineteenth centuries used Protestant hymns and songs to claim American legitimacy for Indians and blacks. Although written 16 years ago, her article remains one of the few scholarly studies of magic lantern hymn slides. A brief discussion of religious lantern slides, with some color reproductions of slides of "Rock of Ages," can be found in Terry Lindvall (2007), *Sanctuary Cinema: Origins of the Christian Film Industry* (New York University Press, New York).



Sheet music for "Rock of Ages" (1893) by William Thomas Giffe (1848-1926). Indiana University Library.

The Magic Lantern in American Literature

Robert H. Woodward

***ML Bulletin*, Vol. II, no. 4, January 1981**

Like any item used in popular culture and figuring in the day-to-day life of the people, the magic lantern has left its record in the literature of America.

Probably the most notable and most familiar reference to the magic lantern is in T. S. Eliot's famous 1915 poem, "The Love Song of [J.] Alfred Prufrock." The timid and inhibited Prufrock, though he senses the spiritual and emotional sterility of the Western civilization that Eliot would later characterize full in his poem "The Waste Land" (1922), is aware of the futility of bringing the shallowness of their lives to the attention of the fellow inhabitants of his meaningless world. Any comment he would make, he says, would reveal his sensitivity and expose him to scorn—"as if," he comments in line 105, "a magic lantern threw the nerves in patterns on a screen." Eliot's brief reference to the magic lantern suggests, even to modern readers unfamiliar with the device, some idea of a slide projector with which they are familiar, but it does not, of course, convey the social significance of the ancestors of the modern slide machines.

A more extended description of a magic lantern show at a time when lantern slides were used by public lecturers, and when lantern shows were a popular form of entertainment, can be found in a novelette by the writer Harold Frederic that first appeared in the pages of *The New York Times* in six weekly Sunday issues beginning on April 29, 1894. The story, "Marsena" (later included in Frederic's *In the Sixties* in 1897), is set in the New York village of Octavius, Frederic's fictional name for his hometown of Utica, during the Civil War. The fourth section of the story describes in some detail a "magic lantern performance" as part of a fair put on by the citizens for the purpose of raising money for the Field Hospital and Nurse Fund. Frederic vividly describes the kind of slides appropriate to the occasion, as well as the difficulties an inexperienced operator had with "this new-fangled contrivance":

Then came a flashing broad disk of light on the screen above the judges bench, a spreading sibilant murmur of interest, and the show began.

It was an oddly limited collection of pictures—mainly thin and feeble copies of newspaper engravings, photographic portraits and ideal heads from the magazines. Winfield Scott followed in the wake of Kossuth, and Garibaldi led the way for John C. Fremont and Lola Montez. There was applause for the long, familiar face of Lincoln, and a derisive snicker for the likeness of Jeff Davis turned upside down. Then came the local heroes from the district round about—Gen. Boyce, Col. McIntyre, and young Adjt. Heron, who had died so bravely at Ball's Bluff—mixed with some landscapes and statuary, and comic caricature or two. The rapt assemblage murmured its recognitions, sighed its deeper emotions, chuckled over the funny plates—deeming it all a most delightful entertainment. From time to time there were long hitches, marked by a curious sputtering noise above, and the abortive flashes of meaningless light on the screen, and the explanation was passed about in undertones that Mr. Shull was having difficulties with the machine.

"There was applause for the long, familiar face of Lincoln."

A particular slide that ends the show had been added surreptitiously by the operator of the lantern, Mr. Shull, to embarrass Marsena Pulford, his partner in a portrait studio. The lantern show is not merely a realistic addition to the story, but has an important dramatic purpose.

Though only a youngster during the time of the Civil War, Frederic had a life-long interest in photography and likely drew his description of the lantern performance from his childhood memories. Frederic makes the common mistake,

however, of referring to the performance as a "stereopticon show" even though only one lantern was used [In fact, this was not a mistake. The term "stereopticon" was used to describe any sort of lantern used to show photographic slides, and some of the earliest stereopticon shows visited Utica, New York, in the 1860s. John Fallon's Stereopticon was announced in Utica in 1863 (*Utica Morning Herald*, March 10, 1863), and Prof. Cromwell returned with Fallon's Stereopticon in 1869 (*Utica Daily Observer*, November 27, 1869)—**The Editor**].

Though fascinated by contrivances and inventive in adapting them to symbolic purposes in his stories, Nathanial Hawthorne did not, I believe, make use of magic lanterns in any of his work; but in his well-known story "Ethan Brand" (1850), he makes dramatic use of an optical instrument, a portable diorama box carried on the back of an old German who traveled about giving shows to interested spectators:

The pictures were worn out, moreover, tattered, full of cracks and wrinkles, dingy with tobacco smoke, and otherwise in a most pitiable condition. Some purported to be cities, public edifices, and ruined castles in Europe; others represented Napoleon's battles and Nelson's seafights; and in the middle of these would be seen a gigantic, brown, hairy hand—which might have been mistaken for the Hand of Destiny, though in truth in was only the showman's—pointing its forefinger to various scenes of the conflict, while its owner gave historical illustrations.

Robert H. Woodward contributed a number of articles to our society's publications in the 1970s and 1980s, including a seven-part "Magic Lantern Bibliography." A scholar of American literature, he wrote or edited a number of books, including *The Craft of Prose* (1963), *The Social Rebel in American Literature* (1968), *Jack London and the Amateur Press* (1983), and several books on Herold Frederic, the focus of this article.

Compared to the extensive body of scholarly work on the magic lantern in English literature, some of which was reviewed in the "Research Page" in the Summer 2009 issue of the *Gazette*, the study of magic lantern imagery or narratives in American literature remains a largely neglected subject. What little has been written has focused on American writers who spent much of their lives in England (T. S. Eliot and Henry James). The magic lantern metaphor in Eliot's "The Lovesong of J. Alfred Prufrock" is explored in some detail in David Trotter (2006), "T. S. Eliot and Cinema," *Modernism/modernity*, vol. 13, no. 2, pp. 237-265. The use of magic lantern metaphors by Henry James is discussed in Heather Fielding (2009), "'The Projection of His Consciousness': James and Narrative Technology," *Modern Language Quarterly*, vol. 70, no. 2, pp. 224-243. Edgar Allan Poe's use of optical imagery, with some reference to magic lanterns, is described in Rae Beth Gordon (2000), "Poe: Optics, Hysteria, and Aesthetic Theory," *www.Cercles* 1, pp. 49-60.

The Magic Lantern and the Passing Show

Leora Wood Wells

ML Bulletin, Vol. III, no. 1, April, 1981

In this era, when the very definition of the magic lantern seems unclear, it is difficult to realize how pervasive knowledge of this optical device was in earlier generations. During the 19th century, it was known to the intellectual elite, to the common people who crowded into Town Hall on Saturday night, to rowdy prospectors who gathered under Western stars to watch slides projected against the side of the peddler's wagon, to children in the nursery who joyfully awaited Papa's coming because of the wonderful show he would soon provide. "Magic lantern" was as common a part of the daily vocabulary as refrigerator, automobile, airplane, and television are today. It was a generic term, expansive in its meaning, yet precise enough to convey the underlying concept it represented.

Writers frequently used the term in a figurative sense to establish a sort of "Grand Hotel" or "passing show" implication. Marguerite, Countess of Blessington, introduced her best known book, *The Magic Lantern, or Sketches of Scenes in the Metropolis* (London, 1823), with an anonymous couplet:

> *My magic lantern holds to view*
> *Of fools, a crown; of wise, but few.*

In a letter to an American friend, Charles Dickens put the city in a similar context, and credited its ever-changing panorama of quick impressions with being a major stimulator of his creative powers: "I cannot express how much I want...streets, and numbers of figures... For a week or a fortnight I can write prodigiously, a day in London setting and starting me up again. But the toil and labor of writing day after day without that magic lantern is immense."

The political scene also struck writers, as it does today, as a "good show." A Portuguese journal of comic political commentary and cartoons, published in 1875, was called *The Magic Lantern*, and featured a small, square lantern with "piecrust" chimney on its masthead. Nearly a century later, during a major political crisis, *Washington Post* columnist George Dixon reported that he had followed every development "until the final magic lantern slide was shown."

Writers have often turned to magic-lantern-related terms to describe how people perceive each other. In *The Blithedale Romance* (1852), Nathaniel Hawthorne's recreation of the Brook Farm community, the author was eager to assume readers that the story, though based on fact, was fictional.

In the preface, he says: "[The author's] present concern...is merely to establish a theatre, a little removed from the highway of ordinary travel, where the creatures of his brain may play their phantasmagorical antics without exposing them to too close a comparison with the actual events of real lives."

Writers have always recognized that these "antics" presented in fictional form, often reveal human character as a deeper level of truth than the mundane encounters of real life, just as magic lantern slides often reveal scenes more colorful and exciting than reality. "F.E.F.," who wrote for *Graham's Magazine*, could not resist a pun in the title of a short story in the March, 1848, issue. It was called, "Dissolving Views, or a Belle in a New Light." In it, two highly bred sisters are distressed by their brother's infatuation with a girl of a lower social class. Their other brother suggests that to destroy the romance, all they need do is invite the young lady to an elegant ball: "If Harry saw Miss Dawson among young ladies of a different style and stamp, the changes of the 'dissolving view' would not be greater. The present picture would fade away, and a new, and in all probability a very different one, would take its place." The scheme works: "Never was a 'dissolving view' more perfect. Harry had really imagined Miss Dawson not only to be beautiful, but thought she would grace any drawing room in Europe. He now saw her hoyenish, flirty, and ungraceful, with beauty of a very unrefined style—in fact, a different person...The spell was broken."

Many writers have been fascinated with the notion that everyone carries his own "magic lantern" about in his own head and has only to observe the "passing show" it provides to gain new insights. In an essay titled "Phantasmagoria" (*Graham's Magazine*, May 1848), John Neal advises, "Every human being with his eyes about him, has, under all circumstances, and at all times, with his reach, a subject to his order, a heap of amusement, a whole treasury of unappropriated wisdom.... If you will but place yourself at an open window...and watch the clouds that are now drifting, as before a strong wind, over the driest and busiest thoroughfares of your crowded city; changing from shadow to sunshine, and from sunshine to shadow, every uplifted countenance over which they pass, you will find yourself at the very next breath a wiser, a better, and a happier man."

In "A Visit" (*Graham's Magazine*, September 1852), Fredrika Bremer [1801-1865] brilliantly evokes one of those breathtakingly lovely days that make one want to reach out and embrace the whole world, to stretch one's imagination, to hold brilliant conversations. But she has been ill, and is alone in the house. The best she can do is stand at her window, hoping a friend will come by. Times passes; no one comes: "Again I pace the carpets of the drawing room. No matter; it was yet good time for visiting, it was early yet, and a visit I should certainly have that night; and many a face passed in the camera obscura of my mind—many a vision of my expected visitor."

Fredrika Bremer (1801-1865) traveled in the United States from 1849 to 1851 and wrote about her travels.

Oliver Wendell Holmes also uses the camera obscura analogy (*The Autocrat of the Breakfast Table*, 1858). A man only falls in love with a particular woman, he says, when he singles her out from the crowd and focuses on her, and her alone, in his "mental camera obscura." Holmes applies his "mental optics" analogies again in this passage in the same book: "A great calamity...stains backward through all the leaves we have turned over in the book of life.... For this we seem to have lived; it was foreshadowed in dreams that we leaped out of in a cold sweat of terror; in the 'dissolving views' of dark day-visions; all omens pointed to it; all paths led to it."

The similarity between sleep apparitions and magic lantern projections is noted many times in literature. In his work on dreams, Georges Louis Leclerc, Comte de Buffon (1707-1788) described what happens as one lies half way between waking and sleep: "Then is the time for chimerical images and flitting shadows. If we are in full health, the images are agreeable, the illusions are charming; but if the body is disordered or oppressed, then we see grim and hideous phantoms, which succeed each other in a manner not more whimsical than rapid. It is a magic lanthorn, a scene of chimeras, which fill the brain, when destitute of other sensations."

In *Memories, Dreams, Reflections*, Swiss psychiatrist Carl Gustave Jung (1875-1961) reported that in a half conscious state after suffering a heart attack, he experience deliriums and visions in which "the whole phantasmagoria of earthly existence fall away or was stripped from me—an extremely painful experience."

Many years later, in a dream, he saw several lens-shaped UFOs hurtling toward him. Then another object came speeding through the air: "... a lens with a metallic extension which led to a box—a magic lantern. At a distance of sixty or seventy yards it stood still in the air, pointing straight at me. I awoke with a sense of astonishment.... The thought passed through my head, 'We always think that the UFOs are projections of ours. Now it turns out that we are their projections. I am projected by the magic lantern as C. G. Jung. But who manipulates the apparatus?'".

The use of magic-lantern-related terms by such diverse authors over such a long span of time tells us not only how widely known lanterns were, but also that by their very nature, they touch a deeply responsive chord in people. They can project a world that terrifies use or one as we would like it to be. They can symbolize how we perceive each other. And perhaps, as Jung implied, they can even tell us something about ourselves.

Leora Wood Wells, the first editor of our society's publication, wrote this article in an earlier era, when coming across references to magic lanterns in literary works was largely a matter of chance. She found most of these passages by browsing through old books and magazines picked up in antique shops and used bookstores. Unfortunately, the article was published without references. Many of these are much easier to find now, thanks to internet sources such as Google Books. The articles from *Graham's Magazine* quoted in this article, for example, can be accessed online, as can the passages from Dickens and many other writers. Indeed, there is a vast untapped resource of magic lantern references in poems, short stories, and non-fiction writing by well-known and obscure writers of the 18th and 19th centuries that can now be found by searching online periodicals and books.

The whole subject of the use of visual and optical metaphors in literature is a growing field of study. Some recent articles were reviewed in the "Research Page" in the Summer 2009 issue of the *Gazette.* Other notable work on this topic includes: Carol T. Christ and John O. Jordan, eds. (1995), *Victorian Literature and the Victorian Visual Imagination* (University of California Press, Berkeley); Kate Flint (2000), *The Victorians and the Visual Imagination* (Cambridge University Press, New York); Stephen Bottomore (2005), "A Word Paints a Thousand Pictures: The Magic Lantern in Language and Metaphor, pp. 56-61 in: Richard Crangle, Mervyn Heard, and Ine van Dooren, eds. *Realms of Light: Uses and Perceptions of the Magic Lantern from the 17th to the 21st Century* (Magic Lantern Society, London); John Plunkett (2005), "Optical Recreations and Victorian Literature, pp. 1-28 in: David Seed, ed., *Literature and the Visual Media* (D. S. Brewer, Cambridge, UK); Marina Warner (2006), *Phantasmagoria: Spirit Visions, Metaphors, and Media into the Twenty-first Century* (Oxford University Press, New York);

Lewis Carroll in Magic Lantern Land

Leora Wood Wells

ML Bulletin, Vol. III, #4, January 1982

> She looked up, and there was the Cat again, sitting on the branch of a tree.... "I wish you wouldn't keep appearing an vanishing so suddenly. You make one quite giddy."
>
> "All right," said the Cat, and this time it vanished quite slowly, beginning with the end of the tail, and ending with the grin, which remained some time after the rest of it had gone.
>
> "Well, I've seen a cat without a grin," thought Alice, "but a grin without a cat! It's the most curious thing I ever saw in my life."
>
> Lewis Carroll, *Alice in Wonderland*

What magic lantern devotee, reading this passage from Lewis Carroll's *Alice in Wonderland*, would not think of a slip slide or a dissolving view? Or what about the Duchess's baby turning into a pig? The White Queen in *Through the Looking Glass* becoming a sheep whose knitting needles transmogrify into boat oars? Or what about Alice herself, changing from normal size to nine feet tall and then a mere three inches? Do they not all suggest the "magical" effects of a skillfully projected lantern show?

Lantern slide of Alice with the Duchess's baby turned into a pig, from the illustration by John Tenniel. Dick Moore collection.

Few writers have had such a gift for imagery as Lewis Carroll, and it is tempting to assume that his frequent use of dissolving techniques carried over into his writing from personal experience with magic lanterns.

But did it? This turns out to be a question of, "Which came first, the chicken or the egg?". That Lewis Carroll used and enjoyed magic lanterns is amply documented, but whether he wrote as he did because of them, or whether he enjoyed them because they produced a result so closely akin to the way he thought and wrote, is an unanswerable question.

Lewis Carroll, whose real name was Charles Lutwidge Dodgson (1832-1898), was born in Cheshire, England. The son and grandson of clergymen, he was himself ordained a deacon in 1861, but never moved fully into clerical life—partly because he could not reconcile this calling with his fascination with theatricals. As a boy, he had created a marionette theater for his siblings, and throughout his life, theater-going was one of his principal pleasures. A shy young man with a stammer, he entered Christ College at Oxford at 19 and remained there the rest of his life, moving from student status to lecturer in mathematics, but never feeling completely at home as a don. From all accounts, his lectures were boring, both to his students and to him.

Lewis Carroll. From: *The Life and Letters of Lewis Carroll*, edited by Stuart Dodgson Collingwood (Century, New York, 1898). Wells collection.

It was not always so. He started his teaching career with high hopes. In January 1856, after meeting for the first time with a class of boys he had agreed to teach at St. Alban's School in Oxford, he noted in his diary that he had found the experience "much more pleasant than I expected." The boys, however, were boisterous and high spirited, and it occurred to the novice teacher that to hold their interest, "it would be a very good idea to have the slides of a magic lantern painted." Whether he carried through on this idea or not, this teaching venture lasted exactly one month. By February 26, he found the class "noisy and inattentive" and the whole notion of teaching young boys "disheartening." Three days later he left word at the school that he would not come again.

Years later, in the 1870s, this experience was reflected in a satiric paper Dodgson wrote called "Notes of an Oxford Chiel." In a list of imaginary requirements for a Mathematical School, he included "a magic room, which might be darkened, and fitted up with a magic lantern, for the purpose of exhibiting Circular Decimals in the act of circulation."

After this first teaching fiasco, Dodgson devoted himself to his work as Sub-Librarian and Lecturer to college-age students at Christ Church College—both of which he found, if not particularly stimulating, at least less taxing than coping with young boys. But his real interests lay elsewhere. However unpleasant he found young boys to be, he found little girls enchanting, and it was as a result of a meeting with one of them on April 25, 1856, that the shy young don, Charles Dodgson, evolved—or should we say dissolved?—into the supreme storyteller, Lewis Carroll. The child he met was Alice Pleasance Liddell, one of several daughters of the Dean of Christ Church. She was not quite four at the time, but already a charmer, and Dodgson spent many happy hours over the next several years in company with her and her sisters.

Their chief enjoyment lay in the wonderful stories he told them, inventing as he went along. Because Alice was his favorite, he made her the central character in the remarkable adventures he described. After a particularly enjoyable day on the river in July, 1862, Alice begged him to "write out Alice's adventures" for her, and he sat up all night trying to get it all down on paper. When Christmas came, he gave her a carefully bound manuscript of the story, complete with his own illustrations. By 1863, word of the wonderful book had spread, and Dodgson was urged to publish it. He did, but thinking the fantasy unsuitable to the dignity of an Oxford don, he used the *nom de plume* by which he became known all over the world.

But this gets ahead of our story of Dodgson's interest in magic lanterns. When he first became acquainted with

Alice Liddell as "The Beggar-Child," from a photograph by Lewis Carroll. From: *The Life and Letters of Lewis Carroll*, edited by Stuart Dodgson Collingwood (Century, New York, 1898). Wells collection.

them is not clear, but it was probably fairly early in his boyhood. He loved mechanical toys of all sorts, and his rooms at Oxford contained an impressive collection of them with which he amused the growing numbers of his young friends. Photography—a still new art—was another of his interests, and he bought himself a camera in March, 1856. On December 20 of the same year, he recorded another important purchase: "Sent to Watkin and Hill, Charing Cross, to arrange to buy a magic lantern."

He wasted no time putting it to use. On New Year's Eve, while visiting his family's home for the holidays, he noted, "First exhibition of the Magic Lantern: the largest audience I ever had, about eighty children, and a large miscellaneous party besides of friends, servants, etc." Apparently the show was a great success, because he gave another show the following night and found it not nearly "so trying to the voice" as he had expected. On another occasion, he made the Great Hall of Christ Church ring with laughter as he presented a magic lantern show for the children of Oxford.

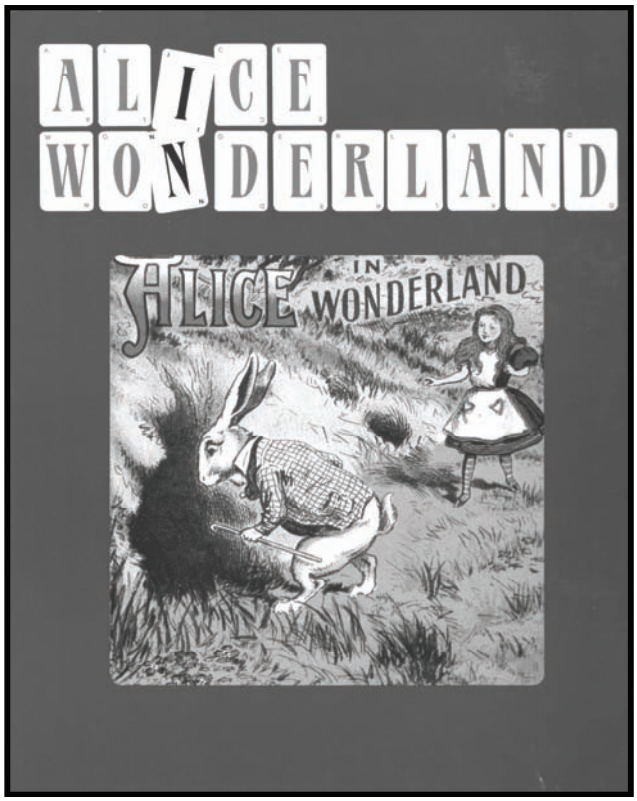
Dodgson was as interested in seeing magic lantern shows as he was in giving them. On January 22, 1857, he and his Uncle Skeffington made quite a day of it in London. They visited the Photographic Gallery and the Polytechnic to see new photographic exhibits, took in a magic lantern show, and topped it off with a visit to the Princess Theatre to see *A Midsummer Night's Dream* and a pantomime performance of *Aladdin and the Wonderful Lamp*. Of the magic lantern show, a history of Blue Beard, he wrote, "the pictures [were] good, the accompanying lecture rather dull." Three years later, he wrote his sister Marcy a detailed description of "a series of dissolving views of the Arctic" he had just seen.

One experience which seems to have had particular influence on Dodgson's interest in special effects achieved through the use of the magic lantern was a visit he paid to the Princess's Theatre in London on June 22, 1855, to see Shakespeare's *Henry VIII*. It was, he wrote in his diary, "the greatest theatrical treat I ever had or ever expect to have." He thought Charles Kean magnificent as Cardinal Wolsey and Ellen Tree (Mrs. Kean) superb as Henry's tragic queen, Catherine of Aragon, who accepted her divorce from Henry with such dignity and resignation:

> But oh, that exquisite vision of Queen Catherine! I almost held my breath to watch; the illusion is perfect...sunbeams broke through the roof and gradually revealed two angel forms, floating in front of the carved work in the ceiling: the column of sunbeams shone down upon the sleeping queen, and gradually down it floated a troop of angelic forms, transparent, and carrying palm branches in their hands: they waved these over the sleeping queen, with oh! such a sad and solemn grace...She in an ecstasy raises her arms toward them, and to sweet slow music they vanish as marvelously as they came.

Dodgson was, in fact, so entranced by this performance that he took a party of relatives to see it on June 26. "Parts of the play I enjoyed even more than the last time," he wrote, "the Vision especially." From then on, he tended to measure other stage illusions by the yardstick of this one. A year later, when he returned to the same theater to see *A Winter's Tale*, he recorded that "The visions were gorgeous, but did not please me nearly as much as Queen Catherine's dream." Oddly enough, he does not seem to have recorded how these illusions were achieved, although his mechanical bent would surely have made him investigate this question.

During this period, Dodgson's contacts with uses of the magic lantern were many and varied. The children of another Oxford don, George MacDonald, were among Dodgson's many close child friends, and years later, one of them wrote nostalgically of outings with him during the 1860s—going down in a diving bell, visiting toy shops and panoramas, and, as a special annual treat, going to the Polytechnic "for the entrancing 'dissolving views' of fairy tales."



Modern children's version of *Alice in Wonderland*, illustrated entirely with magic lantern slides from John Tenniel's illustrations (Harry Abrams, New York, 1988). Wells collection.

By 1876, the *Alice* story itself, represented through the superb illustrations of John Tenniel, was presented in dissolving views at the Polytechnic.

Although Dodgson's principal fame now rests with the two *Alice* books, photography was his consuming passion over a twenty-five year period from 1855 until 1880, and he was one of the best amateur portrait photographers of that era. His favorite subjects were his many little girl friends, and he noted sadly that at the age of thirteen or so, they suddenly changed, "and hardly for the better," and he lost interest in them. Indeed, the central them of *Alice in Wonderland* is change. Nothing is stable, nothing remains the same—even Alice herself.

Was Dodgson's urge to capture the innocent, fleeting beauty of childhood in photographs his way of conferring a sort of childhood immortality on them? he could not stop the passage of time, but through photographs, he could, at least, try to keep his little friends from disappearing altogether, like the shy, funny little ghost who is the central character of *Phantasmagoria*, his 1869 book of humorous verses.

He describes the changing image of the ghost:

> And still he seemed to grow more white,
> More vapoury, and waiver—
> Seen in the dim and flickering light,
> As he proceeded to recite
> His Maxims of Behaviour.

Finally, having delivered all his maxims, the little ghost discovers to his great "dyscomfyture" that he has been talking the entire time to the wrong man. But, reconciled to this fact, he admits it was his errror, and he brings the whole interview to an abrupt but comradely close:

> But gracious me! It's getting light!
> Goodnight, old Turnip-top, goodnight!

He gives a nod and disappears, as all good phantasmagoric ghosts must do. He had been a fleeting image, captured for only a moment of time.

In his dedication to *Through the Looking Glass*, published in 1872, when Alice was nineteen, Carroll again picked up the theme of the fleeting nature of human relationships:

> I have not seen thy sunny face,
> Nor heard they silver laughter;
> No thought of me shall find a place
> In thy young life's hereafter—
> Enough that now thou will not fail
> To listen to my fairy-tale.

There was no going back. Alice—the beloved Alice-child of his stories—had vanished from his life almost as completely as the little phantasmagoric ghost—or one of the dissolving slides in his magic lantern shows.

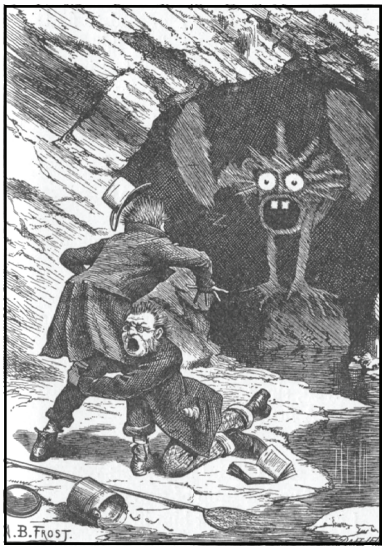


Illustration by Arthur B. Frost for Lewis Carroll's *Phantasmagoria and Other Poems* (Macmillan, London, 1911). Wells collection.

Like many of the early articles published in our journal, the article on Lewis Carroll by **Leora Wood Wells** was published without references. I believe the main sources for this article were *The Life and Letters of Lewis Carroll*, edited by Stuart Dodgson Collingwood (Century, New York, 1898); *The Magic of Lewis Carroll*, edited by John Fisher (Bramhall House, New York, 1973); *Lewis Carroll: An Illustrated Biography*, by Derek Hudson (New American Library, New York, 1977); and *The Letters of Lewis Carroll*, edited by Morton N. Cohen. 2 vols. (Oxford University Press, New York, 1979)

The literature on Lewis Carroll is voluminous, and most biographies make some reference to his interest in magic lanterns. The standard biography is *Lewis Carroll: A Biography*, by Morton N. Cohen (Knopf, New York, 1995). Other useful sources are *Lewis Carroll: Looking Glass Letters*, selected and introduced by Thomas Hinde (Collins and Brown, London, 1991) and *Lewis Carroll: A Celebration*, edited by Edward Guiliano (Clarkson N. Potter, New York, 1982). The definitive work on Lewis Carroll's interest in photography is *Lewis Carroll: Photographer*, by Roger Taylor and Edward Wakeling (Princeton University Press, Princeton, N. J., 2002). An article that compares lantern slides of *Alice in Wonderland* with the original illustrations is: [David Henry and Dennis Crompton, eds]., "The Primus Alice in Wonderland Slides," *The New Magic Lantern Journal*, vol. 6, no. 1, pp. 11-15 (January, 1989).—**The Editor**.

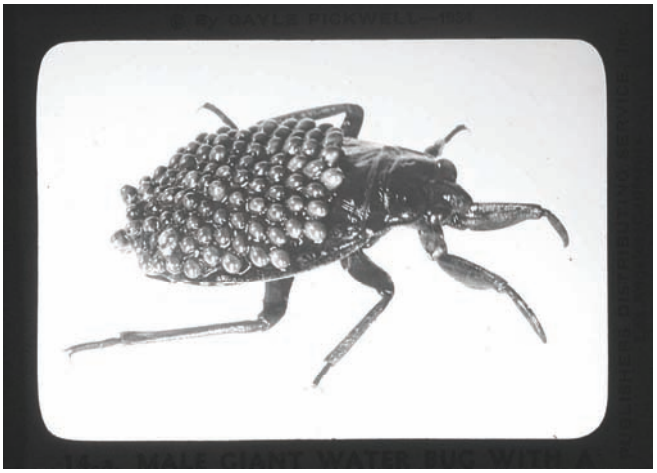
Brownies, Woggle-Bugs, and Magic Lanterns

Leora Wood Wells

***ML Bulletin*, Vol. II, no. 4, January 1981**

To children of the pre-cinema era, one of the most startling things about magic lanterns was the size of the images they projected—no just life-size, but almost unimaginably large. Even some small home lanterns could produce a leering, snarling moonface six or eight feet high, a witch big enough to scare a small viewer out of six months' growth, or a vast array of realistic or fanciful animals.

Somehow the insect slides used to illustrate science lessons in the schools held particular fascination. With a single motion of the teacher's wrist as a slide was pushed into place, the tiniest ladybug or dragonfly would appear upon the screen in proportions that dwarfed the attentive children. Complete and perfect in every detail, the huge, brightly colored pictures seemed almost more real than the insects themselves. They attracted and repelled. They inspired wonder and delight, but with a delicious undercurrent of fear. Just suppose, instead of being a picture, the bug should turn out to be real!



Lantern slide of a giant waterbug. In these insects, the female places her eggs on the back of the male, and the male carries them until they hatch. Wells collection.

This was a favorite fantasy, not only of children, but of the writers of children's books, at least those sensitive enough to remember and capture a child's perspective on the world. Palmer Cox (1840-1924) was such a writer. From 1887 onward, his books about the Brownies enchanted several generations of children. The Brownies were what every child dreamed of being—always into some imaginative new adventure, always experimenting, always startling those outside their miniature world, yet mischievous only, and never bad or

destructive.

It was the Brownies, working in the dead of a cold winter night, who put up a scaffolding and built a snowman so big and so solid that he didn't melt until May. It was the Brownies who set quietly to work one autumn night and harvested every last lucious apple in the orchard of a grouchy old farmer, storing them carefully in his barn so he wouldn't lose the crop to frost./

And so, inevitably, it was the Brownies who,

> ....once with capers spry
> To an Academy drew nigh.

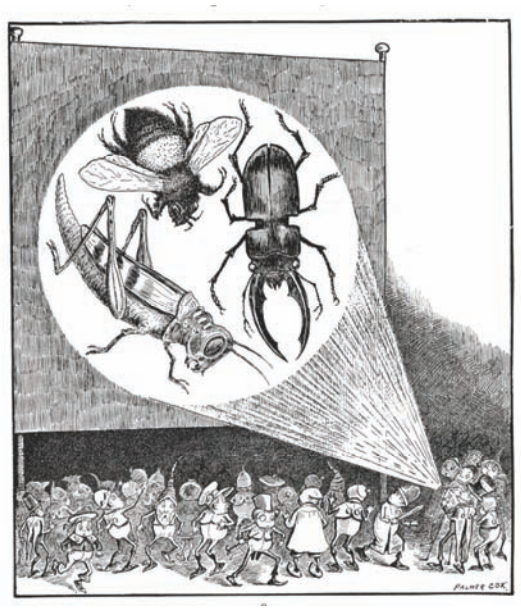
They mixed up batches of chemicals, experimental with dental tooks, and examined a phreological chart. Then:

> A microscope at length they found;
> And next the Brownies gathered round
> A stereopticon machine
> That cast its rays upon a screen.

Even the redoubtable Brownies were overwhelmed by what they saw: ordinary insects—a locust, a beetle, and a bee—were suddenly magnified "a thousand times their real size." To the started Brownies, the insects

> Seemed like monsters close at hand
> To put an end to all the band.

The Brownies wasted no time. They fled the room and found even the skeleton used in the anatomy class less frightening.



The Brownies viewing a lantern slide of insects. From: Palmer Cox, *Another Brownie Book* (Century Company, New York, 1890), p. 9. Wells collection.

L. Frank Baum (1856-1919), that wonderful literary wizard who created the Oz books, carried the "living image" fantasy one step further. In *The Land of Oz*, he describes the "highly magnified history" of Mr. H. M. Woggle-Bug, T.E. The Woggle-Bug, Baum revealed, was once an ordinary bug. But one day he happened into a country schoolhouse and became so enraptured by the lectures of the school master that he remained for three years, becoming, in that time, "Thoroughly Educated."

Then one day, the school master spotted him and "brought from the cupboard a most curious instrument." Before the Woggle-Bug could realize what was happening, he found himself "thrown upon a screen in a highly magnified state." Here Baum took the final fantasy leap; the projected image, larger than life, became life itself. The Woggle-Bug, "knowing what is required of a cultured gentleman...stood upright, and, placing a hand upon my bosom, made a very polite bow."

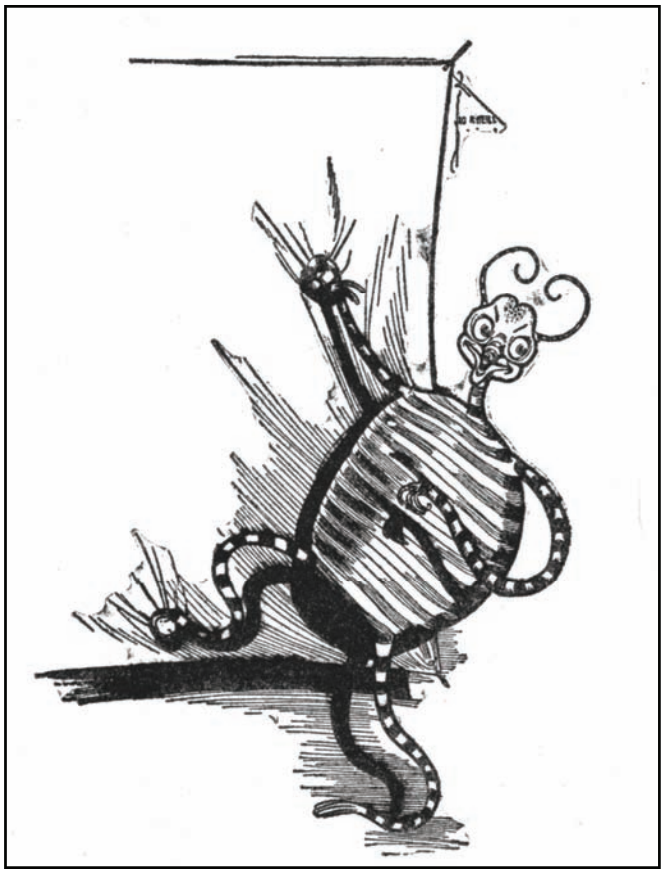
The act was sensational. So startled were the children that two of them fell backwards through the window and the entire schoolroom erupted in turmoil. The Woggle-Bug sized up the situation:

The Woggle-Bug in a highly magnified state. From: L. Frank Baum, *The Land of Oz* (Reilly & Lee, Chicago, 1904), p. 151. Wells collection.

"It immediately occurred to me that this was a good opportunity to escape. I was proud of my great size, and realized now that I could safely travel anywhere in the world...I calmly walked out of the schoolhouse, turned a corner, and escaped unnoticed to a grove of trees that stood near."

From there, the Woggle-Bug, remaining permanently in his Highly Magnified state, went on to bigger and better adventures. His greatest ambition was to visit the Emerald City of Oz, where he planned to give a course of lectures on—what else?—"The Advantages of Magnification."

It is an easy step from the fantasies of Cox and Baum to the grotesqueries of Hollywood's killer bees, oversize rats, and blood-thirsty sharks. These are remarkable examples of film animation, but for all their sophisticated technology, they fall far short of the simple children's stories of Cox and Baum in capturing the intrinsic magic of the projected image.



The Woggle-Bug escaping from the magic lantern screen. From: L. Frank Baum, *The Land of Oz* (Reilly & Lee, Chicago, 1904), p. 153. Illustration by John R. Neill. Wells collection.

The Magic, Magic Lantern Show

Larry Cederblom

The Magic Lantern Bulletin, Vol. 19, no. 1, May, 1989

T'was the night before the big show and the lantern is still,
the theater is ready, the occasion listed on the playbill.

The lantern all dressed up in its brass and tin,
waits for the lanternist to begin.

Slides were chosen and in their proper place,
waiting to be projected, the light to embrace.

When out of the darkness there came a pitter-patter,
the lantern came to life with a sudden clatter!

And the elf that appeared was hard to resist,
he looked the part of an old projectionist.

He knew what to do and started the show,
slides running and dissolving with a continuous flow.

The magic was there in slippers and 'tropes,
this old boy really knew the ropes.

The theater alive with colors and motion,
the elf was causing quite a commotion.

When at least he made a slide appear,
saying "Merry Christmas to all and to all good cheer."

Larry Cederblom is the current Vice President of our society. He also served as Vice President from 1989 to 1996 and Editor of *The Magic Lantern Bulletin* from 1989 to 1991. From 1989 to 2006, he was the graphic designer for our publications, and he currently maintains the society webpage.

Larry Cederblom (left) receiving an award for his society service at the 2006 Seattle Convention, with Sue and Bob Hall, co-editors of *The Magic Lantern Gazette* for 10 years, and Past President Sharon Koch. Photo by K. D. Wells.

Gilberts' Galantee Show

Jane Dayus-Hunch (transmitted by Pat and Ray Gilbert)

The Magic Lantern Gazette, Vol. 11, no. 3, Fall 1999

Tonight we have seen your lantern show
Of slides, pictures, and new things to know.

The abbey changed from day into night
The Pied Piper you showed gave us all such a fright.

The slipping slides were all so clever
Naughty monkeys and a growing flower.

The seasick ship and blacksmith too
Were moving pictures, hand-painted with blue.

The photographic slides were oh so old
With Queen Victoria looking very bold.

Showing us how in days gone by
The Cathedral looked and children were shy.

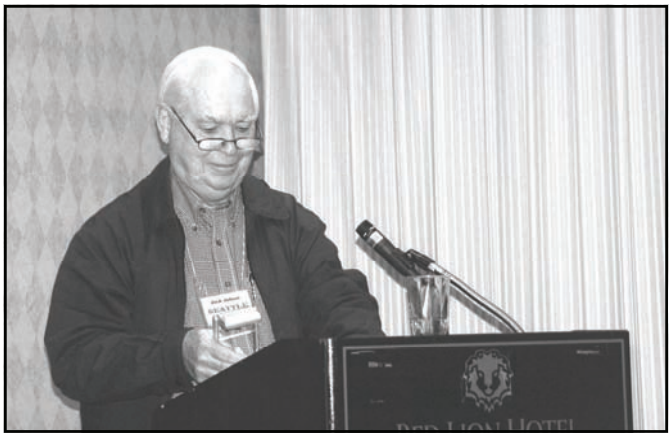
With Greystone Bird and Valentine
Showing sills of capturing a moment in time.

You recited a poem with a motto today
"At the bar of the Gin shop, so glittering and gay."

So we thank you kind sir for your talk here tonight
For the Town Women's Guild it was so cheery and bright.

Editors Postscript: This poem was written, in the dark, by a member of the audience at a magic lantern show presented by Ray and Pat Gilbert to a group in Litchfield, Staffordshire, England.

Some members of our society at the 2008 Washington Convention. From left: Larry Cederblom, David Francis, Terry Borton, Past President Ralph Shape,and Ian Edwards.

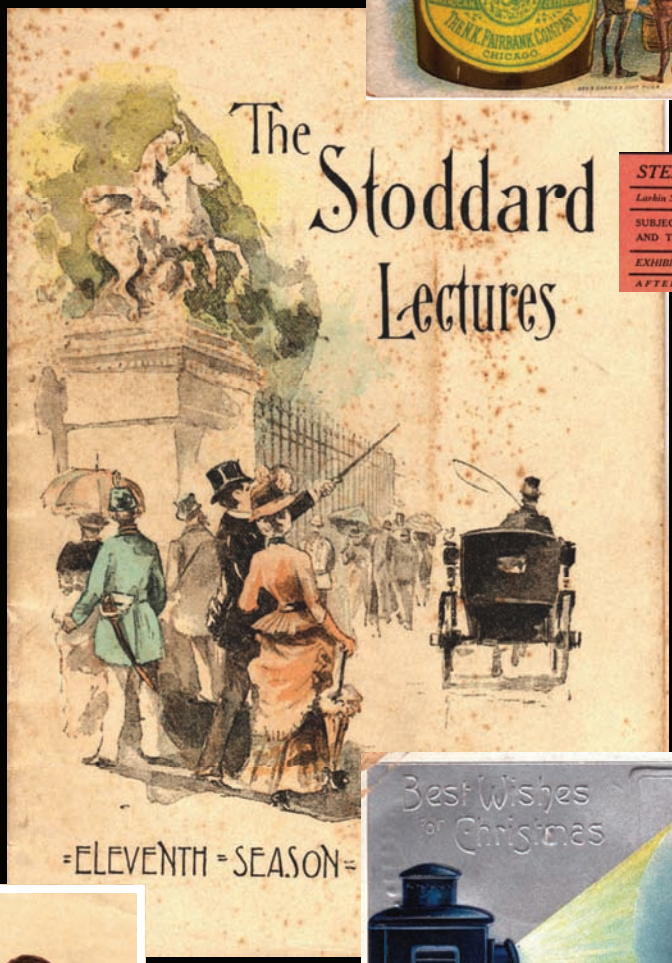


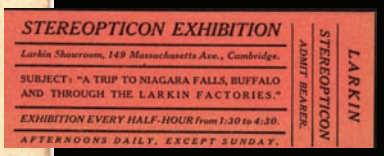
Jack Judson at the 2006 Seattle Convention. Jack served as President of the society from 1989 to 1996 and Editor or co-Editor of *The Magic Lantern Gazette* from 1992 to 1994. He was named an Honorary Life Member in 2004.

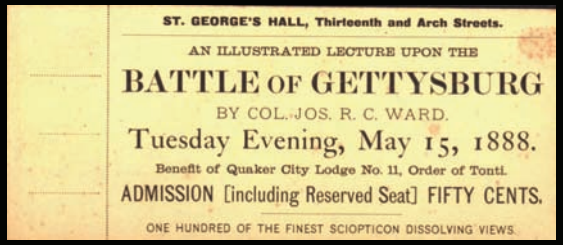
Society members at the 2006 Seattle Convention looking over items offered for sale by Larry Rakow (left), who served as Editor or co-Editor of the *Magic Lantern Bulletin* from 1982 to 1986. He also served as Vice President from 2004 to 2008 and continues to serve as one of the regular auctioneers at our conventions.

Dick Moore, society Secretary/ Treasurer and Ralph Shape, society President, at the 2006 Seattle convention. Dick Moore is current President of the society.

Magic Lantern Ephemera
(see Dick Balzer's article on p. 12)
Wells collection




STEREOPTICON EXHIBITION
Larkin Showroom, 149 Massachusetts Ave., Cambridge.
SUBJECT: "A TRIP TO NIAGARA FALLS, BUFFALO AND THROUGH THE LARKIN FACTORIES."
EXHIBITION EVERY HALF-HOUR from 1:30 to 4:30.
AFTERNOONS DAILY, EXCEPT SUNDAY.
LARKIN
STEREOPTICON
ADMIT BEARER.


ST. GEORGE'S HALL, Thirteenth and Arch Streets.
AN ILLUSTRATED LECTURE UPON THE
BATTLE OF GETTYSBURG
BY COL. JOS. R. C. WARD.
Tuesday Evening, May 15, 1888.
Benefit of Quaker City Lodge No. 11, Order of Tonti.
ADMISSION [including Reserved Seat] FIFTY CENTS.
ONE HUNDRED OF THE FINEST SCIOPTICON DISSOLVING VIEWS.

The pair of hand-colored lantern slides on the covers are entitled "Looking In" and "Looking Out." They are taken from colored engravings by W. O. Geller published by Ackerman and Co., London, in 1836 and 1837. The engravings were copies of oil paintings by Henry Perlee Parker (1795-1873), a British artist who specialized in paintings of fishermen, sailors, and other maritime subjects, depicted mostly on shore. Wells collection.

© The Magic Lantern Society of the United States and Canada